Deutsche Physikalische Gesellschaft DPG

DPG-Frühjahrstagung 2017 (Spring Meeting)

of the Condensed Matter Section (SKM)

together with the DPG Divisions
History of Physics, Microprobes, Physics Education

and the Working Groups
Accelerator Physics, Equal Opportunities, Young DPG

Short Programme

Technical University of Dresden

19 – 24 March 2017

DPG

Impressum:

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Gerichtsstand: Königswinter

Eingetragen in das Vereinsregister (VR 90474) des Amtsgerichtes Siegburg. Die DPG fördert wissenschaftliche Zwecke. Sie ist nach § 5 Abs. 1 Nr. 9 KStG von der Körperschaftsteuer befreit, weil sie ausschließlich und unmittelbar steuerbegünstigten gemeinnützigen Zwecken i. S. der §§ 51 ff. AO dient.

Verantwortlich für den Inhalt:
Dr. Bernhard Nunner (Hauptgeschäftsführer)

Deutsche Physikalische Gesellschaft DPG

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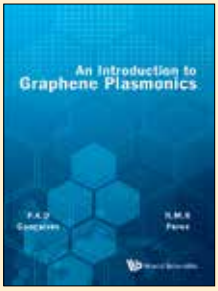
DPG mentoring

New in Condensed Matter Physics



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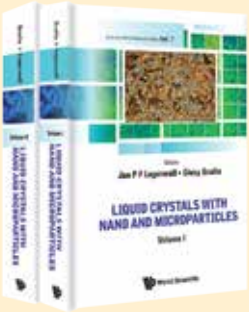

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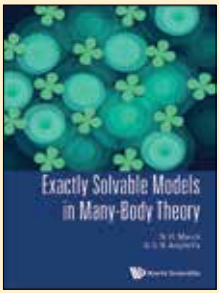

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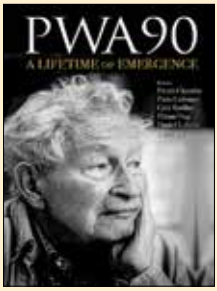

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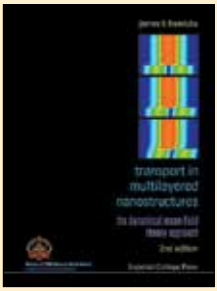

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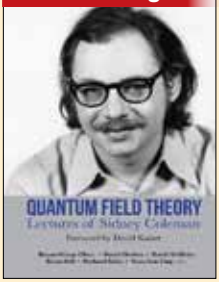

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International Journal of Modern Physics B
Modern Physics Letters B

Top Articles 2016

- **Early Work on Defect Driven Phase Transitions**
  J. Michael Kosterlitz and David J. Thouless
  Int. J. Mod. Phys. B, Vol. 30, No. 25 (2016)
- **Majorana fermions in condensed-matter physics**
  A. J. Leggett
  Int. J. Mod. Phys. B, Vol. 30, No. 19 (2016)
- **The local structure of skutterudites: A view from inside the unit cell**
  Frank Bridges
  Modern Physics Letters B Vol. 30, No. 05 (2016)
- **Berry phase and anomalous velocity of Weyl fermions and Maxwell photons**
  Michael Stone
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Greeting

Dear Participants,

I cordially welcome you to the DPG-Frühjahrstagung (Spring Meeting) at the Technische Universität Dresden of the Condensed Matter Section (SKM) with the divisions and working groups involved. This Spring Meeting offers a rich scientific programme and a special programme for teachers, the "Physics Teachers' Day". Through this Meeting and the other internationally attended DPG Spring Meetings the DPG encourages the exchange of knowledge from home and abroad: more than 10,000 scientists are expected to attend our Spring Meetings this year.

Scientific exchange is of central importance to society today: science is a great asset and an important cultural achievement. Science consists of research and teaching, with a broad range of research ranging from the search for fundamental knowledge to the implementation of innovative ideas into practical applications. These dimensions of science are inseparable. Scientific, by which I mean critical and creative thinking also requires a nurturing social environment. The free exchange of opinions, a culture of listening, of discourse conducted with rational arguments without ideological blinkers, is the prerequisite for real science. Science can flourish only in a society where these prerequisites are given. In return, science can help to promote a culture of tolerance and cooperation. In most scientific working groups, it will be a matter of course that people of different nationalities, cultures and religions co-operate and enrich each other.

An outstanding example of this is the SESAME (Synchrotron Light for Experimental Science and Applications in the Middle East) project, which will start operating this year in Jordan. Founded under the auspices of UNESCO, SESAME is an independent intergovernmental organisation whose members, Bahrain, Cyprus, Egypt, Iran, Israel, Jordan, Pakistan, Palestine and Turkey are pursuing the aim of developing this unique source of synchrotron radiation as a bridge for understanding between neighbours, as CERN did after World War II, overcoming political, cultural and religious differences.

We at the DPG are committed to this spirit and to these values. Unfortunately it is of urgent necessity to point this out in view of the increasingly intolerant tendencies in Germany that are blatantly paraded at times, the rejection of democratic principles, and the rise of populism in Europe and around the world. It is up to us physicists, and associa-

tions like the DPG, to assume our responsibility for bolstering an open and democratic society. This is not just a moral obligation, it is also laid down in our constitution: "The DPG commits itself and its members to champion freedom, tolerance, truthfulness and dignity in science, and to be aware that those operating in science are responsible to a very great extent for shaping the entirety of human life." This principle applies especially to our Spring Meetings with international guests. We therefore call upon politicians to do everything in their power to stem the recent worrying developments and work towards an inclusive and open society. Physics, like any science, knows no political, cultural or religious borders.

I would like to thank the TU Dresden for its hospitality and assistance. I would also like to thank the Wilhelm and Else Heraeus Foundation for its generous support for every DPG Spring Meeting. I wish to express my gratitude to SKM with the divisions and working groups involved for a great programme. My special thanks go to the Local Organising Committee, Prof. Ludwig Schultz and Prof. Dr. Kornelius Nielsch, Leibniz Institute for Solid State and Materials Research Dresden, and their entire team. I thank the DPG office staff for assisting and overseeing every DPG Spring Meeting.

Prof. Dr. Rolf-Dieter Heuer
President of the
Deutsche Physikalische Gesellschaft

Organisation

Organiser

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Scientific Organisation

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Chairs of the Participating Divisions of the DPG

(BP) Biological Physics
– Prof. Dr. Helmut Grubmüller (hgrubmu@gwdg.de)

(CPP) Chemical and Polymer Physics
– Prof. Dr. Dieter Neher (neher@uni-potsdam.de)

(DD) Physics Education
– Prof. Dr. Grebe-Ellis (grebe-ellis@uni-wuppertal.de)

(DF) Dielectric Solids
– PD Dr. Elisabeth Soergel (soergel@uni-bonn.de)

(DS) Thin Films
– Prof. Dr. Norbert Esser (norbert.esser@isas.de)

(DY) Dynamics and Statistical Physics
– Prof. Dr. Walter Zimmermann
(walter.zimmermann@uni-bayreuth.de)

(GP) History of Physics
– Dr. Christian Forstner
(christian.forstner@uni-jena.de)

(HL) Semiconductor Physics
– Prof. Dr. Christoph Lienau
(christoph.lienau@uni-oldenburg.de)

(KR) Crystallography
– Prof. Dr. David Rafaja (rafaja@ww.tu-freiberg.de)

(MA) Magnetism
– Prof. Dr. Michael Farle (farle@uni-due.de)

(MM) Metal and Material Physics
– Prof. Dr. Jörg Neugebauer (neugebauer@mpie.de)

(MI) Microprobes
– Dr. Enrico Langer (langer@physik.tu-dresden.de)

(O) Surface Science
– Prof. Dr. Christof Wöll (christof.woell@kit.edu)

(SOE) Physics of Socio-economic Systems
– Priv.-Doz. Dr. Jens C. Claussen
(j.claussen@jacobs-university.de)

(TT) Low Temperature Physics
– Prof. Dr. Reinhold Kleiner
(reinhold.kleiner@uni-tuebingen.de)

(VA) Vacuum Science and Technology
– Dr.-Ing. Thomas Giegerich
(thomas.giegerich@kit.edu)

Chairs of the Participating Working Groups

(AKBP) Accelerator Physics
– Prof. Dr. Wolfgang Hillert
(wolfgang.hillert@desy.de)

(AKC) Equal Opportunities
– Dr. Susanne Kränkl
(susanne.kraenkl@googlemail.com)

(AGjDPG) Young DPG
– Matthias Dahlmanns (dahlmanns@jdpg.de)

Symposia

SYBM – Bioinspired Functional Materials: From Nature's Nanoarchitectures to Nanofabricated Designs
SYCE – Novel Functionality and Topology-Driven Phenomena in Ferroics and Correlated Electron Systems
SYCM – Physics of Collective Mobility
SYES – Frontiers of Electronic-Structure Theory: New Concepts and Developments in Density Functional Theory and Beyond
SYLI – Interfacial Challenges in Solid-State Li Ion Batteries
SYLM – Optics and Light-Matter Interaction with Excitons in 2D Materials
SYNS – Nanostructuring Beyond Conventional Lithography
SYQO – Quantum Optics on the Nanoscale: From Fundamental Physics to Quantum Technologies
SYSD – SKM Dissertation Prize

Organisation of the Exhibition of Scientific Instruments and Literature

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Programme

The scientific programme consists of 5,213 contributions:

12	Plenary Talks
1	Evening Talks
13	Prize Talks
4	Lunch Talks
278	Invited Talks
53	Topical Talks
14	Tutorials
3144	Contributed Talks
1689	Posters
5	Workshops

Information for Participants

The conference will be held March 19-24, 2017.

Conference Information

Conference Venue

Technische Universität Dresden
Campus Südvorstadt
Bergstraße 64
01069 Dresden

The central activities like registration etc. will take place in the Lecture Hall Center (HSZ) of the TU Dresden (Bergstraße 64). For a detailed map of the campus and the buildings please see end of this booklet. The position of the lecture rooms on the campus can be found at the campus navigator of TU Dresden *https://navigator.tu-dresden.de/* or the DPG-App (see page 12).

Conference Office / Information Desk

The conference office and the information desk are located in the Lecture Hall Center.

		Registration	Information Desk
Sunday	March 19	15:00 – 19:00	15:00 – 20:00
Monday	March 20	08:00 – 19:00	08:00 – 20:00
Tuesday	March 21	08:00 – 16:00	08:00 – 18:00
Wednesday	March 22	08:00 – 16:00	08:00 – 18:00
Thursday	March 23	08:00 – 16:00	08:00 – 18:00
Friday	March 24	08:00 – 12:00	08:00 – 15:00

Beside this programme you have received your name tag, a receipt for your conference fee, a conference ticket and the Login-Password for using WLAN (WiFi). The name tag must be worn visibly during the entire conference. Your name tag in combination with the conference ticket will authorise you to use all buses, trams and S-Bahn of the public transport (DVB AG) in Dresden from March 19 to 24, 2017. The conference ticket is printed on the name tag. A map of public transport in Dresden is included in the registration material and is available at the information desk.

Note: Students of the TU Dresden will not receive a conference ticket on the name tag.

The organisers, staff of the conference desk and student assistants will be identifiable by colored name tags and Φ-T-shirts. Please contact them if you have any questions.

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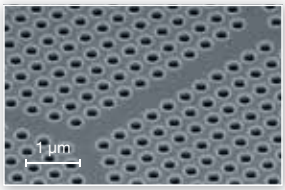

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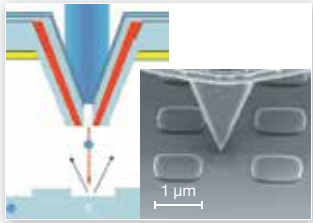

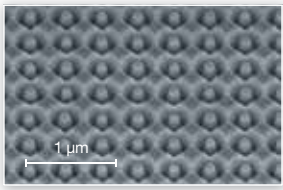

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Do not hesitate to inquire about all necessary information concerning the conference, orientation in Dresden, accommodation, restaurants, going out and cultural events at the information desk.

Lecture Rooms

The lecture rooms will be signposted by abbreviations for the respective buildings and the room number.

Abbr.	**Building** *(see also: https://navigator.tu-dresden.de/)*
BAR	Barkhausen-Bau
CHE	Chemiegebäude (Chemistry Building)
GER	von-Gerber-Bau
GÖR	Görges-Bau
HSZ	Hörsaalzentrum (Lecture Hall Center)
HÜL	Hülsse-Bau
IFW	Leibniz-Institut IFW Dresden
MER	Merkel-Bau
MOL	Mollier-Bau
REC/PHY	Recknagel-Bau (= Physikgebäude)
POT	Potthoff-Bau
SCH	Georg-Schumann-Bau
TRE	Trefftz-Bau
WIL	Willers-Bau
ZEU	Zeuner-Bau
Tents	Tents behind the Lecture Hall Center / Exhibition

With the DPG-App through the Spring Meetings!

The updated DPG-App is ready-to-use and contains additional functions/features: In addition to the option of target groups, the programme booklets for DPG Conferences (VERHANDLUNGEN) are accessible and it is possible to compile a „favorite list“ regarding events one wants to attend. Just download the DPG-App for Android or iOS now and utilize the supplemental offerings. You will find more information under *https://www.dpg-physik.de/service/dpg-app.html.*

Presentation

Scientific presentations will be held either orally or by poster. Presentations with a German abstract will be given in German.

Oral Presentation

Lecturers are requested to provide their presentations

electronically. All lecture rooms are equipped with a projector ("beamer") with VGA input. The projectors mainly display in the 4:3 format. However they are compatible with the 16:9, limited to the display width. Some newer systems also work directly with 16:9. OHPs are not available.

Laptops must be provided by the speakers as well as all associated adapters (e.g. HDMI to VGA, Apple-adapter). Furthermore, the presentation should be recorded onto an USB stick as back-up in PDF and Power Point format.

All laptops must be set up and connected with the data projector before the start of the respective session. All rooms will be opened, at latest, 40 minutes prior to the lecture. Speakers are requested to be in the lecture room at least 25 minutes prior to the start of the session*, to report to the chairperson as well as the technical staff, to ensure that the laptops handshake with the projector, and to receive a brief introduction to the equipment in the lecture room.

** In HSZ 01, 02, 03, and in GER 38 it is recommended to transfer the presentation on the day before the lecture or on Monday morning.*

Poster Presentation

Sites for poster sessions are named and located as follows:

P1A Tent A behind the Lecture Hall Center (Exhibition Tent)
P1C Tent C behind the Lecture Hall Center
P2 Lecture Hall Center (HSZ): foyer (EG), 1st (OG1), 2nd (OG2), 3rd (OG3) and 4th (OG4) floor (hallway)
P3 Chemistry Building (CHE) in the foyer
P4 Leibniz-Institute IFW Dresden (IFW) in the Atrium next to room IFW A

Posters must fit within a rectangle 90 cm wide and 120 cm high (DIN A0), portrait format!

The poster boards will be marked with the number according to the scientific programme. Authors are asked to mount their poster when the poster board is prepared with the corresponding poster number. Usually this will be arranged in the morning, or 1.5 hours before the session when there are several poster sessions per day**. Each poster should display the number according to the scientific programme.

For the mounting of the poster please use the prepared "power strips" at the poster frame or contact the available student staff. Please make sure to use only power strips for mounting the poster (residue-free removing). The present-

ing authors should be at hand for discussion at their poster during at least half of the poster session and should note this time at the poster.

The posters have to be removed after the poster session. Any posters remaining on display walls after the poster session will be removed and destroyed without requesting your permission. The conference management accepts no liability for the posters.

*** several poster sessions per day: Monday P3 and Tuesday P1A, P1C, P2-EG and P2-OG1*

General Information

Internet

EDUROAM

The TU Dresden and IFW Dresden are members of the eduroam-network. Users from eduroam institutions, who have registered for eduroam, can use WLAN at the TU Dresden / IFW without local registration in Dresden. Eduroam in Dresden is possible with WLAN SSID eduroam.

WLAN (WiFi)

In addition internet access is possible via W-LAN network (WiFi) in almost all buildings of the TU-Campus.

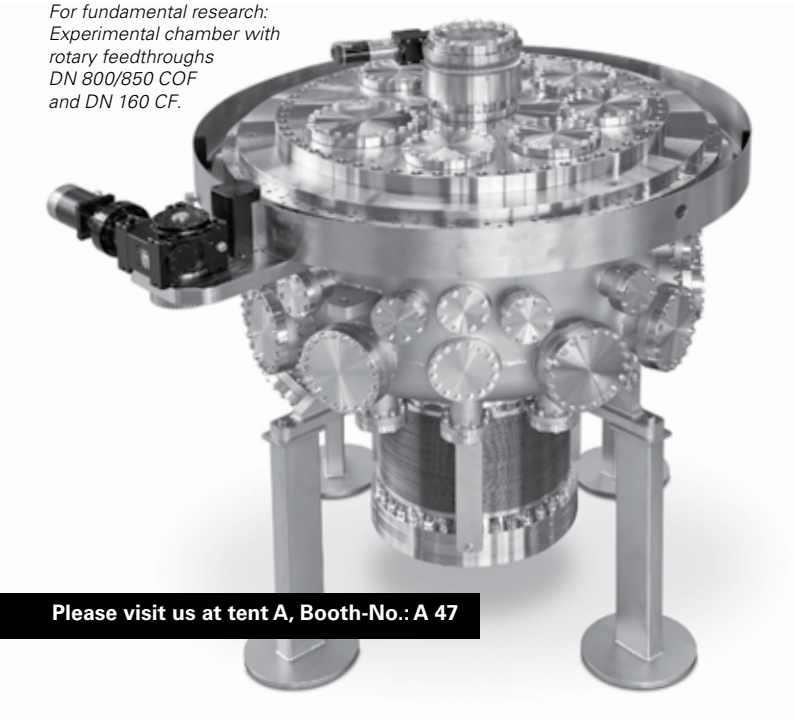
WLAN in the buildings of TU-Campus

For internet access at TU Dresden, please use your individual login-password on your registration document. The network is called VPN/WEB. (If you cannot find this network, the wireless-LAN is unfortunately not available at your location.) If you are connected to the VPN/WEB network and you open an arbitrary website with your browser, the login window for the wireless-LAN appears. Please enter the user name and password provided. With login, you can use the internet access. This connection is not encrypted.

WLAN in Leibniz-Institute IFW Dresden

In the building of IFW Dresden, WLAN access is possible in front of rooms IFW A, B and D. Please connect SSID 'DPG2017'. No authorization is required. This connection is not encrypted.

Vacuum Technology



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Access to the internet is also available in the computer room in von-Gerber-Bau, GER 221. The opening hours are Monday to Thursday from 08:00 to 19:00 and Friday from 08:00 to 14:00.

Discussion with Plenary Speakers (Speakers' Corner)

There is the possibility of informal discussions with the plenary speakers after each plenary session. The meeting place is open immediately after the plenary talk in room E03 of the Lecture Hall Center (HSZ) next to the information desk. Coffee, tea and refreshments are available.

Message Board

All alterations to the scientific programme will be announced via the conference website "Notice Board". All further important information for participants is displayed on a message board in the foyer of the Lecture Hall Center (HSZ).

Public Working Area

In the Chemistry Building, room CHE 184 there is a public room where you can work on your laptop.

Cloakroom

A guarded cloakroom is located in the basement of the Lecture Hall Centre (HSZ). The opening hours are Sunday to Thursday until 21:00 and Friday until 15:00.

Lost and Found Property

You can bring found items to the Lecture Hall Center, room E03 (next to the information desk). There you can also get your lost property back.

Catering

Coffee Breaks

Coffee and tea are offered for free during the breaks in nearly all conference locations (see also in the legend of the campus map). The coffee breaks are from Monday to Thursday at around 09:00 and 14:00 as well as on Friday at around 09:00.

Snacks

You can get coffee, tea, refreshments and snacks as indicated in the campus map at the:

Lecture Hall Centre (HSZ) basement
(only Sunday 15:00 – 18:00)

Tent B behind the Lecture Hall center
(Monday to Thursday, 8:00 – 19:00; Friday, 8:00 – 14:00)

„Grill-Cube“ next to the exhibition tent B
(Monday to Friday, 8:00 – 15:00)

Zeuner-Bau (ZEU) in room ZEU 148
(Monday to Thursday 8:00 – 19:00; Tuesday, 8:00 – 16:00)

Restaurant of the Leibniz-Institute IFW Dresden
(Monday to Friday, 8:00 – 15:30)

„insgrüne coffeebar“ in Georg-Schumann-Bau (SCH)
(Monday to Friday, 8:30 – 15:00)

„BioMensa U-Boot“ in Potthoff-Bau (POT)
(Monday to Friday, 8:30 – 15:00)

Cafeteria Mensa Mommsenstraße
(Monday to Friday, 8:00 – 15:00)

Cafeteria Mensa Zeltschlösschen
(Monday to Thursday, 7:00 to 16:00, Friday, 7:00 – 15:00)

as well as at Bergstr. 68 „FIRAT-Kebap-Haus“ and Münchner Str. „DERSIM-Dürüm-Kebab-Haus“ and bakery „Möbius“.

Lunch

The Mensa Zeltschlösschen and the Mensa Mommsenstraße offer plenty of opportunities for lunch at moderate prices (self-payment). Opening times are Monday to Friday, 11:00 to 14:30. The IFW restaurant offers regular meals for a limited number of conference participants from Monday to Friday, 12:30 to 14:00.

Events

Tutorials

On Sunday, March 19, 16:00 – 18:30, there will be workshops on current scientific topics for interested conference participants, in particular for students and young scientists. All conference participants are welcome.

Topics:

Ferroics and Skyrmions (HSZ 304)

Micromagnetic Simulations (HSZ 401)

Pattern Formation in Nature and Materials (HSZ 04)

Festkörperbatterien (HSZ 403)

Following the tutorials, the **Robert-Wichard-Pohl-Prize Talk** will be given by Prof. Metin Tolan, TU Dortmund

"Die STAR TREK Physik: Warum die Enterprise nur 158 Kilo wiegt und andere galaktische Erkenntnisse"

Sunday, March 19, 18:45 – 19:30, HSZ 01

All conference participants are welcome.

Welcome Evening

On Sunday, March 19, at 19:00 the Welcome Evening will be held in the Mensa Mommsenstraße. Small food, beer and soft drinks will be served. Do not miss the opportunity to register (15:00 to 19:00) before the official beginning of the conference and to meet people in an informal atmosphere. Please wear your name tag which you have received at the registration.

Public Evening Talk

Monday, March 20, 20:00 – 21:00, HSZ 01 (Audimax)

Prof. Dr. Jens Frahm, MPI für Biophysikalische Chemie, Göttingen

„Magnetresonanz-Tomografie in Echtzeit"

The Public Evening is open for all conference participants and the interested public. Please note that the talk will be given in German. The entrance is free.

Free beer will be offered for all conference participants prior to the Evening Talk: Monday, March 20, 19:00 in HSZ.

EinsteinSlam

Tuesday, March 21, 20:00, HSZ 01 (Audimax)

EinsteinSlam is the competitive art of making complex science accessible to a broad audience. There are just 10 minutes for every attendee to present his/her self-made performance. The event will finish with a public poll in order to evaluate if a particular contribution was either instructive and amusing or rather should have never been performed. All presentations will be given in German. For more information please refer to *www.einstein-slam.de*.

Ceremonial Session with Award Ceremony (in German language)

On Tuesday, March 21, at 16:15 the Ceremonial Sessions with Award Ceremony will take place in HSZ 01 (Audimax). The programme is as follows:

Music
„Dresdner Salondamen"

Welcome
Prof. Dr. Ludwig Schultz, IFW Dresden
Local Organiser

Prof. Dr. Gerhard Rödel, TU Dresden
Vice-President for Research

Speech
Prof. Dr. Rolf-Dieter Heuer
President of the Deutsche Physikalische Gesellschaft

Music

Award Ceremony

Walter-Schottky-Prize 2017
to Dr. Helmut Schultheiß
Helmholtz-Zentrum Dresden-Rossendorf

Gaede-Prize 2017
to Dr. Guillaume Schull
Institut de Physique et Chimie des Matériaux
de Strasbourg, France

SKM Dissertation Prize 2017
(The Laureate will be announced after the SKM Dissertation Prize Symposium)

Early Career Award 2017
to Prof. Dr. Sebastian Deffner
UMBC Baltimore, USA

Horst-Klein-Prize 2017
(The Laureate was not chosen at the time of going to press.)

Festsitzung

Deutsche Physikalische Gesellschaft

Preisverleihung

Walter-Schottky-Preis 2017
an Dr. Helmut Schultheiß
(Helmholtz-Zentrum Dresden-Rossendorf)

Gaede-Preis 2017
an Dr. Guillaume Schull
(IPCMS, DSI, Strasbourg, France)

SKM-Dissertationspreis 2017
(Der/die Preisträger/in wird nach dem SKM-Dissertationspreissymposium SYSD ernannt)

Early Career Award des New Journal of Physics
an Prof. Dr. Sebastian Deffner
(UMBC, Department of Physics, Baltimore, MD USA)

Horst-Klein-Preis
(Der/die Preisträger/Preisträgerin stand zum Redaktionsschluss noch nicht fest)

Festvortrag

„*Molecular Semiconductors for LEDs and Solar Cells: Designing around the Coulomb Interaction*"
Prof. Richard Friend,
(Cavendish Laboratory, University of Cambridge, UK)

Dienstag, 21. März 2017, 16:15 – 18:15 Uhr
Audimax (HSZ 01)

DPG

Ceremonial Lecture

Professor Sir Richard Friend,
St. John's College, United Kingdom

"Molecular Semiconductors for LEDs and Solar Cells: Designing around the Coulomb Interaction"

Prize Talks – DPG Awards

Max-Planck-Medaille 2017

(Prize will be awarded at the Annual Meeting in Münster, March 27 - 31, 2017)

Prof. Dr. Herbert Spohn, Technical University of Munich

"Random Matrix Theory and Growing Interfaces in one Dimension"

Monday, March 20, 13:15 – 13:45, HSZ 01

Stern-Gerlach-Medaille 2017

(Prize will be awarded at the Annual Meeting in Münster, March 27 - 31, 2017)

Prof. Dr. Laurens W. Molenkamp, University of Würzburg

"Topological Insulators: a New State of Matter"

Tuesday, March 21, 13:15 – 13:45, HSZ 01

Walter-Schottky-Prize 2017

Dr. Helmut Schultheiß
Helmholtz-Centre Dresden-Rossendorf

"Magnon Transport in Spin Textures"

Wednesday, March 22, 15:00 – 15:30, HSZ 04

Georg-Simon-Ohm-Prize 2017

(Prize will be awarded at the Annual Meeting in Münster, March 27 - 31, 2017)

Moritz Kopetzki, Hochschule für Angewandte Wissenschaften, München

„Mikroelektronische Systeme zur Erzeugung und Charakterisierung eines Hochvakuums"

Tuesday, March 21, 13:15 – 13:45, HSZ 03

Gustav-Hertz-Prize 2017

(Prize will be awarded at the Annual Meeting in Münster, March 27-31, 2017)

Prof. Dr. Dennis Meier, NTNU Trondheim, Norway

"Functional Domain Walls in Multiferroic Oxides"

Wednesday, March 22, 13:15 – 13:45, HSZ 01

Robert-Wichard-Pohl-Prize 2017

(Prize will be awarded at the Annual Meeting in Münster, March 27-31, 2017)

Prof. Dr. Metin Tolan, Universität Dortmund

"Die STAR TREK Physik: Warum die Enterprise nur 158 Kilo wiegt und andere galaktische Erkenntnisse"

Sunday, March 19, 18:45 – 19:15, HSZ 01

Marian-Smoluchowski-Emil-Warburg-Physics-Prize 2017

(Prize will be awarded at the Annual Meeting in Münster, March 27-31, 2017)

Prof. Dr. Andrzej Michal Oleś, Jagiellonian University, Poland

"Exotic Spin-Orbital Order in Transition Metal Oxides"

Thursday, March 23, 13:15 – 13:45, HSZ 01

Hertha-Sponer-Prize 2017

(Prize will be awarded at the Annual Meeting in Münster, March 27-31, 2017)

Dr. Isabelle Staude, Universität Jena

"Controlling Light Fields with Mie-Resonant Dielectric Metasurfaces"

Thursday, March 23, 13:15 – 13:45, HSZ 03

Georg-Kerschensteiner-Prize 2017

(Prize will be awarded at the Annual Meeting in Münster, March 27-31, 2017)

Prof. Dr. Joachim Wambsganß, Astronomisches Rechen-Institut Universität Heidelberg

"Uni(versum) für alle – Halbe Heidelberger Sternstunden"

Tuesday, March 21, 11:00 – 11:30, HSZ 01

Prize Talks – Young Academic Awards

SKM Dissertation Prize 2017

The laureate will be chosen during the SKM Dissertation Prize Symposium (SYSD) on Monday, 10:30 in HSZ 04 and publicly announced on Tuesday in the afternoon during the ceremonial session.

Young Scientist Award for Socio- and Econophysics 2017 (Division SOE)

Prof. Dr. Francisco C. Santos, GAIPS / INESC-ID, IST Tagus-park, Porto Salvo, Portugal

"Climate Change and Global Governance in an Uncertain World"

Monday, March 20, 16:00 – 17:00, HSZ 01

INNOMAG e.V. Dissertationspreis und Diplom-/Master-preis 2017 (AG Magnetismus)

The laureate will be chosen after the session MA 11.

Monday, March 20, 15:00 – 17:00, HSZ 101

Early Career Award 2017 (New Journal of Physics)

Prof. Dr. Sebastian Deffner, UMBC Baltimore, USA

"Fast Quantum Processes without Excitations: Shortcuts to Adiabaticity"

Wednesday, March 22, 09:30 – 10:00, HÜL 186

Gerhard Ertl Young Investigator Award 2017 (Division O)

The laureate will be chosen after the session O 92.

Thursday, March 23, 10:30 - 13:00, TRE Ma

Further Prize Talk

Gaede-Prize 2017 (Deutsche Vakuumgesellschaft)

Dr. Guillaume Schull, Institut de Physique et Chimie des Matériaux de Strasbourg, France

"STM-induced light emission: from molecular LED to subnano-metric optical microscopy"

Tuesday, March 21, 15:30 – 16:00, WIL C307

Annual General Meetings of the DPG Divisions and the Working Group

	Divisions	Date	Time and Allocation
BP	Biological Physics	Wednesday, March 22	18:30 – 19:30 HÜL 386
CPP	Chemical and Polymer Physics	Thursday, March 23	18:30 – 19:15 ZEU 222
DD	Physics Education	Tuesday, March 21	16:00 – 18:00 GER 38
DF	Dielectric Solids	Wednesday, March 22	18:00 – 19:00 GER 37
DS	Thin Films	Wednesday, March 22	19:00 – 20:00 CHE 89
DY	Dynamics and Statistical Physics	Thursday, March 23	19:30 – 20:30 ZEU 160
GP	History of Physics	Monday, March 20	17:15 – 19:15 HSZ 105
HL	Semiconductor Physics	Thursday, March 23	18:00 – 19:00 POT 81
KR	Crystallography	Tuesday, March 21	18:00 – 19:00 HSZ 204
MA	Magnetism	Thursday, March 23	18:00 – 19:00 HSZ 04
MI	Microprobes	Thursday, March 23	15:00 – 16:00 MER 02
MM	Metal and Material Physics	Wednesday, March 22	19:30 – 20:30 BAR 205
O	Surface Science	Thursday, March 23	19:00 – 19:30 HSZ 01
SOE	Physics of Socio-economic Systems	Tuesday, March 21	15:30 – 16:00 GÖR 226
TT	Low Temperature Physics	Thursday, March 23	19:00 – 20:30 HSZ 304
VA	Vacuum Science and Technology	Monday, March 20	16:00 – 16:30 HSZ 301
AKBP	Accelerator Physics	Thursday, March 23	18:00 – 19:00 MOL 213

Job Market

During the conference various companies and organizations will present their working fields and career opportunities to all interested participants. The presentations will last for about 30 minutes plus discussion. For additional information and contacts refer to the information board close to the conference office.

Programme

Tuesday, March 21, HSZ 405

12:00 – 13:00 **Basycon Unternehmensberatung GmbH**

„Hypothesen, Modelle, Experimente – Was Forschung und Unternehmensberatung gemeinsam haben"

13:15 – 14:15 **McKinsey**

„Karrieremöglichkeiten bei McKinsey"

Wednesday, March 22, HSZ 405

13:15 – 14:15 **Forschungszentrum Jülich GmbH**

„Karrierewege in der Physik - Forschungszentrum Jülich"

Thursday, March 23, HSZ 105

12:00 – 13:00 **d-fine GmbH**

"Physiker (m/w) im Bereich Risiko und Finanzen – Vorstellung d-fine"

14:30 – 15:30 **The Boston Consulting Group**

„Als Naturwissenschaftler in die Strategieberatung"

Exhibition of Scientific Instruments and Literature

From Tuesday to Thursday there will be an exhibition of scientific instruments and literature. The exhibition will take place in the Lecture Hall Center (Foyer) and the nearby exhibition tent A. More than 130 companies (see list of exhibitors at the end of this booklet) will present their products. Opening hours are from 9:00 to 17:00. All conference participants are welcome to attend the exhibition. The entrance is free.

DPG-Teachers' Days (Lehrertage der DPG)

Wednesday, March 22 and Friday, March 24, 2017

The DPG's traditional "Teachers' Days" are addressed to teachers and student teachers, and will take place within the context of the DPG-Frühjahrstagung (Spring Meeting). Participation of the DPG-"Teachers' Days" is free. All pres-

entations will be given in German. You will find the programme in this booklet (abbreviation: LT, page 513) and on the local server *http://dresden17.dpg-tagungen.de/veranstaltung/lehrertage.html*

Organisation: Prof. Gesche Pospiech, Didaktik der Physik, Technische Universität Dresden, *didaktik@physik.tu-dresden.de*

Wilhelm and Else Heraeus Communication Programme

Important notes for participants who apply for a grant of the Wilhelm and Else Heraeus Foundation:

At the beginning of the conference you will receive an identification form at the conference office. The participation in the conference must be certified by the conference desk. You have the possibility to leave this certificate by the staff members of the DPG (recommended!) in the conference office or submit it to the DPG head office (DPG-Geschäftsstelle, Hauptstr. 5, 53604 Bad Honnef, Germany) by April 14, 2017 at the latest.

For more detailed information refer to *http://dresden17.dpg-tagungen.de.*

The Deutsche Physikalische Gesellschaft thanks the Wilhelm and Else Heraeus Foundation for the generous financial support of young academic talents. We hope that young physicists will continue to seize the offered opportunity for active scientific communication at scientific conferences. A total of about 30,000 young academics were supported by this programme so far.

Acknowledgement

The organisers and the local secretary want to thank

- the Wilhelm and Else Heraeus Foundation, Hanau
- the TU Dresden
- the Leibniz Institute for Solid State and Materials Research Dresden
- the official sponsors of the DPG-Frühjahrstagung (refer to page 27 - 28)

for supporting the conference and all staff, who make the conference possible.

Disclaimer of Liability

Participants are asked to look carefully after their wardrobe, valuables, laptops, and other belongings for which the organisers are not liable.

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THORLABS


Goodfellow

Sunday, March 19, 2017

Prize Talk

PV I 18:45 — 19:30 HSZ 01
Die STAR TREK Physik: Warum die Enterprise nur 158 Kilo wiegt und andere galaktische Erkenntnisse
•Metin Tolan (Laureate of the Robert-Wichard-Pohl-Prize 2017)

Tutorials (TUT)

Sessions

TUT 1 16:00 — 18:30 HSZ 304
Tutorial: Ferroics and Skyrmions

TUT 2 16:00 — 18:30 HSZ 401
Tutorial: Micromagnetic Simulations

TUT 3 16:00 — 18:30 HSZ 04
Tutorial: Patterns in Nature and Materials (DY/BP/CPP)

TUT 4 16:00 — 18:15 HSZ 403
Tutorial: Photocatalysis (HL/O)

Dielectric Solids Division (DF)

Tutorials

DF 1.1 16:00 — 16:50 HSZ 304
Introduction to ferroic materials
•Claude Ederer

DF 1.2 16:50 — 17:40 HSZ 304
Skyrmions with ferroelectric polarization in multiferroic lacunar spinels
•Alois Loidl

DF 1.3 17:40 — 18:30 HSZ 304
Skyrmions in magnetic materials
•Jonathan White

Session

DF 1 16:00 — 18:30 HSZ 304
Tutorial: Ferroics and Skyrmions

Dynamics and Statistical Physics Division (DY)

Tutorials

DY 1.1 16:00 — 16:50 HSZ 04
The fascination of pattern formation: Basic principles, applications, future directions
•Walter Zimmermann

DY 1.2 16:50 — 17:40 HSZ 04
On growth and forms in nature
•Chaouqi Misbah

DY 1.3 17:40 — 18:30 HSZ 04
What can pattern formation theory tell us about ecosystem response to climate change?
•Ehud Meron

Session

DY 1 16:00 — 18:30 HSZ 04
Patterns in Nature and Materials (DY/BP/CPP)

Semiconductor Physics Division (HL)

Tutorials

HL 1.1 16:00 — 16:40 HSZ 403
An Introduction to Rechargeable Battery Technology and Current Research Trends
•Bryan McCloskey

HL 1.2 16:40 — 17:20 HSZ 403
Theory and Simulations for All-Solid State Batteries
•Christoph Scheurer

HL 1.3 17:35 — 18:15 HSZ 403
Solid State Ionics – Mechanisms and Experimental Methods in Battery Research
•Ruediger-A. Eichel

Session

HL 1 16:00 — 18:15 HSZ 403
Tutorial: Photocatalysis

Magnetism Division (MA)

Tutorials

MA 1.1 16:00 — 16:45 HSZ 401
An overview of mumax3 with a spotlight on its newest features
Arne Vansteenkiste, •Jonathan Leliaert, Mykola Dvornik, Mathias Helsen, Felipe Garcia-Sanchez, Bartel Van Waeyenberge

MA 1.2 16:45 — 17:30 HSZ 401
Micromagnetics simulations with MicroMagnum and OMNeS
•Kai Litzius, Matthias Sitte

MA 1.3 17:45 — 18:30 HSZ 401
Computational micromagnetics with JOOMMF
•Hans Fangohr, Marijan Beg

Session

MA 1 16:00 — 18:30 HSZ 401
Tutorial: Micromagnetic Simulations

Welcome Evening (for registered participants only)

19:00 Mensa Mommsenstraße

Monday, March 20, 2017

Plenary Talks

PV II 08:30 — 09:15 HSZ 01
Operating quantum states in single magnetic molecules
•Wolfgang Wernsdorfer

PV V 14:00 — 14:45 HSZ 01
Electric Field Control of Magnetism
•Ramamoorthy Ramesh

PV VI 14:00 — 14:45 HSZ 02
The Emergence and Evolution of Life Beyond Physics
•Stuart Kauffman

Prize Talk

PV III 13:15 — 13:45 HSZ 01
Random matrix theory and growing interfaces in one dimension
•Herbert Spohn
(Laureate of the Max-Planck-Medaille 2017)

Lunch Talk

PV IV 13:15 — 13:45 HSZ 02
From the physics lab to production: Organic photovoltaics as a fascinating field for industry scientists
•Karsten Walzer

Symposium SKM Dissertation Prize 2017 (SYSD)

Invited Talks

SYSD 1.1 10:30 — 10:55 HSZ 04
Coherent Backscattering and Many-Body Spin Echo in Fock Space: Genuine Many-Body Interference vs. Equilibration
•Thomas Engl

SYSD 1.2 10:55 — 11:20 HSZ 04
Magnetization Dynamics of Itinerant and Localized Electrons in Lanthanide Metals
•Björn Frietsch, Robert Carley, Martin Teichmann, Kristian Döbrich, John Bowlan, Martin Weinelt

SYSD 1.3 11:20 — 11:45 HSZ 04
Dynamics of Thin Smectic Films: From Viscous Fluid to Quasi Elastic Behaviour
•Kirsten Harth

SYSD 1.4 11:45 — 12:10 HSZ 04
Group IV Epitaxy for Advanced Nano- and Optoelectronic Applications
•Stephan Wirths

Session

SYSD 1 10:30 — 12:10 HSZ 04
SKM Dissertation Prize 2017

Symposium Novel Functionality and Topology-Driven Phenomena in Ferroics and Correlated Electron Systems (SYCE)

Invited Talks

SYCE 1.1 15:00 — 15:30 HSZ 02
Ferroelectric domain walls: from conductors to insulators and back again
•Petro Maksymovych

SYCE 1.2 15:30 — 16:00 HSZ 02
Zoology of skyrmions and the role of magnetic anisotropy in the stability of skyrmions
•Istvan Kezsmarki, Sandor Bordacs, Jonathan White, Vladimir Tsurkan, Alois Loidl, Peter Milde, Hiroyuki Nakamura, Andrey Leonov

SYCE 1.3 16:00 — 16:30 HSZ 02
Magnetic imaging of topological phenomena in ferroic materials
•Weida Wu

SYCE 1.4 17:00 — 17:30 HSZ 02
Topological skyrmion textures in chiral magnets
•Markus Garst

SYCE 1.5 17:30 — 18:00 HSZ 02
Learning through ferroelectric domain dynamics in solidstate synapses
Sören Boyn, Gwendal Lecerf, Stéphane Fusil, Sylvain Saïghi, Agnès Barthélémy, Julie Grollier, Vincent Garcia, •Manuel Bibes

Session

SYCE 1 15:00 — 18:00 HSZ 02
Novel Functionality and Topology-Driven Phenomena in Ferroics and Correlated Electron Systems (DF with MA, KR, MI, TT and DS)

Symposium Interfacial Challenges in Solid-State Li Ion Batteries (SYLI)

Invited Talks

SYLI 1.1 09:30 — 10:00 HSZ 02
Interfacial challenges in solid-state Li ion: some perspectives from theory
•Alan Luntz, Saskia Stegmaier, Johannes Voss, Karsten Reuter

SYLI 1.2 10:00 — 10:30 HSZ 02
Will solid electrolytes enable lithium metal anodes in solid state batteries?
•Jürgen Janek, Dominik Weber, Wolfgang Zeier

SYLI 1.3 10:30 — 11:00 HSZ 02
Hybrid Electrolytes for Solid-State Batteries
•Hans-Dieter Wiemhöfer

SYLI 1.4 11:15 — 11:45 HSZ 02
Neutron diffraction on solid-state battery materials
•Helmut Ehrenberg, Anatoliy Senyshyn, Mykhailo Monchak, Sylvio Indris, Joachim Binder

SYLI 1.5 11:45 — 12:15 HSZ 02
Sulfate-based Solid-State Batteries
•Yuki Katoh

Sessions

SYLI 1 09:30 — 12:15 HSZ 02
Symposium Interfacial Challenges in Solid-State Li Ion Batteries

SYLI 2 15:45 — 16:45 IFW A
Interface-dominated behaviour

SYLI 3 17:15 — 18:00 IFW A
Sulphate- and phosphate-based electrolytes

Biological Physics Division (BP)

Invited Talks

BP 1.1 09:30 — 10:00 ZEU 250
Conformational Transitions in the Presence of Solvent and Internal Memory Effects
•Roland Netz, Julian Kappler, Jan Daldrop, Bartosz Kowalik, Florian Brünig

BP 2.1 09:30 — 10:00 HÜL 386
Visualization and Manipulation of the Invisible
•Heinrich Leonhardt

BP 3.1 09:30 — 10:00 SCH A251
Cilia-based transport networks
•Eberhard Bodenschatz

BP 4.1 15:00 — 15:30 ZEU 250
Antibiotic-induced gene expression noise and cross-protection at the single-cell level
•Tobias Bollenbach

BP 5.1 15:00 — 15:30 HÜL 386
Metal Induced Energy Transfer
•Jörg Enderlein

BP 6.1 15:00 — 15:30 SCH A251
Quantifying and modelling active motion in biological systems
•Timo Betz

Sessions

BP 1 09:30 — 13:00 ZEU 250
Computational Biophysics (Joint Session BP/DY)

BP 2 09:30 — 12:45 HÜL 386
Bioimaging and Spectroscopy I

BP 3 09:30 — 13:00 SCH A251
Mechanics and Dynamics of 3D Tissues – Joint Focus Session (BP/CPP/DY) organised by Peter Loskill

BP 4 15:00 — 17:30 ZEU 250
Systems Biology & Gene Expression and Signalling

BP 5 15:00 — 17:30 HÜL 386
Single Molecule Biophysics

BP 6 15:00 — 16:45 SCH A251
Cell Mechanics (Joint Session BP/DY)

BP 7 17:30 — 19:30 P3
Posters – Mechanics and Dynamics of 3D Tissues (Focus Session)

BP 8 17:30 — 19:30 P3
Posters – Bioimaging and Spectroscopy

BP 9 17:30 — 19:30 P3
Posters – Cell Mechanics

BP 10 17:30 — 19:30 P3
Posters – Single Molecule Biophysics

Chemical and Polymer Physics Division (CPP)

Invited Talks

CPP 1.1 09:30 — 10:00 ZEU 222
Dynamically Reconfigurable Soft Matter in External Fields: Smart Particle Gels, Shape-Changing Clusters and Self-Propelling Microbots
•Orlin D Velev

CPP 3.1 10:15 — 10:45 ZEU 222
The Versatility of Mesoscopic Solar Cells
•Anders Hagfeldt

CPP 4.1 10:15 — 10:45 ZEU 114
Membrane nanotube formation in giant vesicles
•Rumiana Dimova

CPP 5.1 10:15 — 10:45 ZEU 255
A Combined Rheological and Dielectric Analysis of Filler Networking in Elastomer Nano-Composites
•Manfred Klüppel

CPP 8.1 15:00 — 15:30 ZEU 222
Visualizing Charge Carrier Diffusion In Hybrid Halide Perovskite Thin Films

•Achim Hartschuh, Kathrin Handloser, Irene Grill, Nicolai Hartmann, Nadja Giesbrecht, Meltem Aygüler, Mathhias Handloser, Thomas Bein, Pablo Docampo

CPP 8.2 15:30 — 16:00 ZEU 222
Photon recycling in hybrid lead-halide perovskite semiconductors
•Felix Deschler

CPP 8.5 16:45 — 17:15 ZEU 222
Interface engineering: the route towards high efficiency and stable hybrid perovskite solar cells
•Giulia Grancini

CPP 9.1 15:00 — 15:30 ZEU 260
Molecular Electrical Doping of Organic Semiconductors
•Ingo Salzmann

Sessions

CPP 1 09:30 — 10:00 ZEU 222
Keynote Lecture I

CPP 2 09:30 — 13:00 SCH A251
Mechanics and Dynamics of 3D Tissues (joint focus session BP/CPP, organised by BP)

CPP 3 10:15 — 13:00 ZEU 222
Fundamentals of Perovskite Photovoltaics I (joint session CPP/DS/HL)

CPP 4 10:15 — 13:00 ZEU 114
Bioinspired Functional Materials I

CPP 5 10:15 — 13:00 ZEU 255
Polymer Networks and Dynamics I: Elastomers and Magnetic Materials

CPP 6 10:15 — 13:15 ZEU 160
Focus: Soft Particles in Flows I (joint focus session CPP/DY)

CPP 7 11:00 — 13:00 ZEU 260
Organic Electronics and Photovoltaics I: Light-Emitting Devices (joint session CPP/DS/HL, organised by CPP)

CPP 8 15:00 — 18:15 ZEU 222
Fundamentals of Perovskite Photovoltaics II (joint session CPP/DS/HL)

CPP 9 15:00 — 18:15 ZEU 260
Organic Electronics and Photovoltaics II: Doping (joint session CPP/DS/HL, organised by CPP)

CPP 10 15:00 — 18:15 ZEU 114
Bioinspired Functional Materials II

CPP 11 15:00 — 18:15 ZEU 255
Modelling and Simulation of Soft Matter

CPP 12 15:00 — 18:00 ZEU 160
Focus: Soft Particles in Flows II (joint focus session CPP/DY)

CPP 13 18:30 — 21:00 P1A
Poster: Fundamentals of Perovskite Photovoltaics (joint session CPP, DS, HL)

CPP 14 18:30 — 21:00 P1C
Poster: Bioinspired Functional Materials

CPP 15 18:30 — 21:00 P1C
Poster: Membranes, Biomaterials, Biopolymers

CPP 16 18:30 — 21:00 P1C
Poster: Modelling and Simulation of Soft Matter

CPP 17 18:30 — 21:00 P1C
Poster: Polymer Networks and Dynamics

CPP 18 18:30 — 21:00 P1C
Poster: Colloids and Complex Fluids

Physics Education Division (DD)

Invited Talk

DD 1.1 13:00 — 14:00 GER 38
Erklären im Physikunterricht
•*Christoph Kulgemeyer*

Sessions

DD 1 13:00 — 14:00 GER 38
Hauptvortrag

DD 2 14:00 — 16:00 P3
Postersitzung

DD 3 16:00 — 17:20 GER 39
Lehr- und Lernforschung 1

DD 4 16:00 — 17:20 GER 52
Hochschuldidaktik 1

DD 5 16:00 — 17:20 GER 54
Lehreraus- und Lehrerfortbildung 1

DD 6 16:00 — 17:20 GER 009
Neue Konzepte 1

DD 7 17:40 — 19:00 GER 39
Anregungen aus dem Unterricht für den Unterricht 1

DD 8 17:40 — 19:00 GER 52
Hochschuldidaktik 2

DD 9 17:40 — 19:00 GER 54
Lehreraus- und Lehrerfortbildung 2

DD 10 17:40 — 19:00 GER 009
Astronomie

Dielectric Solids Division (DF)

Topical Talks

DF 3.1 09:30 — 10:00 WIL B321
Controlling core-shell formation in BNT-ST
•Till Frömling, Azatuhi Ayrikyan, Matias Acosta, Leopoldo Molina-Luna, Michael Dürrschnabel, Hans-Joachim Kleebe, Herbert Hutter, Kyle Webber

DF 3.2 10:00 — 10:30 WIL B321
Determining fundamental properties from diffraction: Electric field induced strain and piezoelectric coefficient
•Manuel Hinterstein, Markus Hoelzel, Andrew Studer, Michael J. Hoffmann

DF 3.7 12:30 — 13:00 WIL B321
Ferroic glasses: polar nanoregions in relaxor PMN vs. magnetic nanoparticles in a discontinuous multilayer
•Wolfgang Kleemann

Sessions

DF 2 09:30 — 12:30 GER 37
Various Topics I

DF 3 09:30 — 13:00 WIL B321
Focus: Ferroics with Mesoscopic Order

DF 4 14:00 — 14:45 HSZ 01
PV V – Ramamoorthy Ramesh

DF 5 15:00 — 18:00 HSZ 02
SYCE – Novel Functionality and Topology-Driven Phenomena in Ferroics and Correlated Electron Systems (DF with MA, KR, MI, TT and DS)

Thin Films Division (DS)

Invited Talk, Topical Talks

DS 2.1 09:30 — 10:00 CHE 89
Inhomogeneities in chalcopyrites and kesterites
•Claudia S. Schnohr

DS 2.2 10:00 — 10:30 CHE 89
Impact of growth condition on defect generation in Cu(In,Ga)Se2
•Takeaki Sakurai, Muhammad Islam, Akira Uedono, Shogo Ishizuka, Hajime Shibata, Shigeru Niki, Katsuhiro Akimoto

DS 2.4 11:00 — 11:30 CHE 89
Inhomogeneities in chalcopyrites for solar cells
•Daniel Abou-Ras

DS 2.5 11:30 — 12:00 CHE 89
Understanding the defects in Cu(In,Ga)Se2 solar cell: a correlative microscopy approach
•Oana Cojocaru-Mirédin, Torsten Schwarz, Roland Mainz, Daniel Abou-Ras

DS 12.1 15:00 — 15:30 CHE 89
Defects in Chalcopyrites
•*Susanne Siebentritt*

DS 12.2 15:30 — 16:00 CHE 89
Growth of InGaN film and monolayer by molecular beam epitaxy
•*Xinqiang Wang, Zhaoyin Chen, Xiantong Zheng, Xin Rong, Bowen Sheng, Bo Shen, Tobias Schulz, Martin Albrecht, Frank Bertram, Jürgen Christen*

Sessions

DS 1 09:30 — 13:00 HSZ 204
Transport: Topological Insulators (jointly with DS, MA, HL, O)

DS 2 09:30 — 12:15 CHE 89
Focused Session: Inhomogeneous Materials for Solar Cells I

DS 3 09:30 — 13:00 CHE 91
Thin Film Characterisation: Structure Analysis and Composition I

DS 4 09:30 — 12:45 POT 81
Focus Session: Two-dimensional materials I (jointly with HL/TT)

DS 5 10:15 — 13:00 ZEU 222
Fundamentals of Perovskite Photovoltaics I (jointly with CPP)

DS 6 10:30 — 13:00 REC/PHY C213
2D Materials Beyond Graphene I (jointly with O)

DS 7 12:30 — 13:15 CHE 89
Atomic Layer Deposition

DS 8 14:45 — 18:15 POT 81
Focus Session: Two-dimensional materials II (jointly with HL/TT)

DS 9 15:00 — 18:15 HSZ 204
Transport: Graphene and Carbon Nanostructures (jointly with HL/MA/TT)

DS 10 15:00 — 18:00 HSZ 304
Transport: Topological Phases (jointly with DS/MA/TT)

DS 11 15:00 — 18:15 ZEU 222
Fundamentals of Perovskite Photovoltaics II (jointly with CPP/DS/HL)

DS 12 15:00 — 16:15 CHE 89
Focused Session: Inhomogeneous Materials for Solar Cells II

DS 13 15:00 — 16:45 CHE 91
Phase Change/Resistive Switching

DS 14 16:00 — 18:30 REC/PHY C213
2D Materials Beyond Graphene II (jointly with CPP)

DS 15 16:30 — 17:15 CHE 89
Focussed Session: Frontiers in Exploring and Applying Plasmonic Systems I (Joint Session of CPP, DS, HL, MM, and O, organised by DS)

DS 16 17:00 — 18:30 CHE 91
Layer Properties: Electrical, Optical, and Mechanical Properties I

DS 17 17:45 — 19:00 CHE 89
Thermoelectric Materials

Dynamics and Statistical Physics Division (DY)

Invited Talks

DY 2.1 09:30 — 10:00 HÜL 186
Stochastic thermodynamics and the thermodynamic uncertainty relation
•*Udo Seifert*

DY 7.1 10:15 — 10:45 ZEU 160
Immersed Boundary Methods for Rigid and Deformable Particles in Viscoelastic flows
•*Eric Shaqfeh*

DY 7.5 11:45 — 12:15 ZEU 160
Effect of bending on the dynamics of a spherical capsule in shear flow
•*Anne-Virginie Salsac*

DY 9.1 15:00 — 15:30 ZEU 160
Particle alignment in microchannels and microjets
•Stephan Foerster, Mathias Schlenk, Susanne Seibt, Martin Trebbin, Josef Breu, Stephan Roth

Sessions

DY 2 09:30 — 12:30 HÜL 186
Stochastic thermodynamics and information processing

DY 3 09:30 — 13:00 ZEU 250
Computational Biophysics (joint BP/DY)

DY 4 09:30 — 13:00 SCH A251
Mechanics and Dynamics of 3D Tissues – Joint Focus Session (BP/CPP/DY) organised by Peter Loskill

DY 5 09:30 — 10:00 ZEU 222
Keynote Lecture I

DY 6 10:00 — 12:15 ZEU 118
Many-Body Quantum Systems (joint session DY/TT)

DY 7 10:15 — 13:15 ZEU 160
Soft Particles in Flows I (Focus session, joint DY/CPP)

DY 8 15:00 — 19:15 ZEU 118
Statistical Physics far from Thermal Equilibrium

DY 9 15:00 — 18:00 ZEU 160
Soft Particles in Flows II (Focus session, joint DY, CPP)

DY 10 15:00 — 16:45 SCH A251
Cell Mechanics (Joint Session BP/DY)

DY 11 15:30 — 18:00 HÜL 186
Critical phenomena

DY 12 15:30 — 17:15 ZEU 147
Delay and Feedback Dynamics

DY 13 17:30 — 18:30 ZEU 147
Complex Systems

History of Physics Division (GP)

Invited Talk

GP 1.1 15:00 — 15:30 HSZ 105
Was will eine Globalgeschichte der Physik? Begrüßung und Einführung
•*Christian Forstner*

Sessions

GP 1 15:00 — 16:00 HSZ 105
Einführung

GP 2 16:00 — 17:00 HSZ 105
Freie Sektion I

GP 3 17:15 — 19:15 HSZ 105
Mitgliederversammlung des Fachverbandes Geschichte der Physik

Semiconductor Physics Division (HL)

Invited Talks

HL 5.1 09:30 — 10:00 POT 81
Van der Waals heterostructures: tunnelling and interaction with light
•*Artem Mishchenko*

HL 5.6 11:30 — 12:00 POT 81
Excitons in ultra-thin perovskites & van der Waals crystals
•*Alexey Chernikov*

HL 6.1 09:30 — 10:00 POT 51
Optical Coherent Multidimensional Spectroscopy of Semiconductor Nanostructures
•*Steven Cundiff*

HL 7.11 12:30 — 13:00 POT 151
Carbon nanotubes as excitonic insulators
•*Massimo Rontani*

HL 15.1 14:45 — 15:15 POT 81
2D / 3D Heterostructures for Optoelectronis
•*Max Lemme*

HL 15.6 16:45 — 17:15 POT 81
Excitons in colloidal 2D-CdSe nanocrystals
•*Ulrike Woggon*

HL 16.1 14:45 — 15:15 POT 51
The role of phonons for the optical control of semiconductor quantum dots
•*Doris Reiter*

Sessions

HL 2 09:30 — 12:15 HSZ 02
SYLI: Symposium Interfacial Challenges in Solid-State Li Ion Batteries – Invited talks

HL 3 09:30 — 13:00 HSZ 204
Transport: Topological Insulators (jointly with DS, MA, HL, O)

HL 4 09:30 — 12:15 CHE 89
Focused Session: Inhomogeneous Materials for Solar Cells I

HL 5 09:30 — 12:45 POT 81
Focus Session: Two-dimensional materials I (joined session with TT)

HL 6 09:30 — 12:45 POT 51
Ultrafast Phenoma I

HL 7 09:30 — 13:00 POT 151
Spintronics I (joined session with TT)

HL 8 09:30 — 11:45 POT 251
Photovoltaics

HL 9 09:30 — 12:30 POT 112
Quantum Dots: Preparation and Characterisation

HL 10 09:30 — 12:30 POT 06
Semiconductor Lasers I

HL 11 10:30 — 13:00 TRE Ma
Plasmonics and Nanooptics I: Light-Matter Interactions

HL 12 10:30 — 13:00 GER 38
Electronic-Structure Theory: New Concepts and Developments in Density Functional Theory and Beyond – I

HL 13 11:00 — 13:00 ZEU 260
Organic Electronics and Photovoltaics I: Light-Emitting Devices

HL 14 14:00 — 18:00 P2-OG3
Poster: Two-Dimenaional Materials and Topological Insulators

HL 15 14:45 — 18:15 POT 81
Focus Session: Two-dimensional materials II (joined session with TT)

HL 16 14:45 — 17:30 POT 51
Ultrafast Phenoma II

HL 17 14:45 — 17:00 POT 151
Spintronics II (joined session with TT)

HL 18 14:45 — 17:30 POT 06
Semiconductor Lasers II

HL 19 15:00 — 18:15 HSZ 204
Transport: Graphene and Carbon Nanostructures (jointly with DY, DS, HL, MA, O)

HL 20 15:00 — 18:15 ZEU 222
Fundamentals of Perovskite Photovoltaics II (joint session CPP/DS/HL)

HL 21 15:00 — 18:15 ZEU 222
Fundamentals of Perovskite Photovoltaics II (joint session CPP/DS/HL)

HL 22 15:00 — 18:15 ZEU 260
Organic Electronics and Photovoltaics II: Doping

HL 23 15:00 — 16:45 TRE Ma
Plasmonics and Nanooptics II: Light-Matter Interaction

HL 24 15:00 — 18:15 GER 38
Electronic-Structure Theory: New Concepts and Developments in Density Functional Theory and Beyond – II

HL 25 15:00 — 19:00 P2-OG2
Poster: Nitrides

HL 26 16:30 — 17:15 CHE 89
Focussed Session: Frontiers in Exploring and Applying Plasmonic Systems II (Joint Session of CPP, DS, HL, MM, and O, organised by DS)

HL 27 17:00 — 18:30 TRE Ma
Plasmonics and Nanooptics III: Light-Matter Interaction

HL 28 18:30 — 21:00 P1A
Poster: Fundamentals of Perovskite Photovoltaics (joint session CPP, DS, HL)

Crystallography Division (KR)

Session

KR 1 09:30 — 12:30 GER 37
Various Topics I (with DF)

Magnetism Division (MA)

Invited Talks

MA 2.1 09:30 — 10:00 HSZ 01
Electrical Control of Quantum Coherent Phenomena in Insulating Antiferromagnets
•Arne Braatas

MA 2.3 10:15 — 10:45 HSZ 01
Electronic and magnonic spin transport in antiferromagnets
Lamprini Frangou, Guillaume Forestier, Stephane Auffret, Serge Gambarelli, •Vincent Baltz

MA 2.4 11:00 — 11:30 HSZ 01
Staggering antiferromagnetic domain wall velocity in a staggered spin-orbit field
•Olena Gomonay

MA 2.6 11:45 — 12:15 HSZ 01
Current induced switching of an antiferromagnet
Peter Wadley, Michal J. Grzybowski, Carl Andrews, Sonka Reimers, Richard P. Campion, Vit Novak, Francesco Maccherozzi, Sarnjeet S. Dhesi, •Kevin W. Edmonds, Bryan L. Gallagher, Jakub Zelezny, Tomas Jungwirth

MA 10.1 15:00 — 15:30 HSZ 04
Magnetoelastic coupling and lattice dynamics in magnetocaloric materials
•Markus Ernst Gruner, Werner Keune, Michael Wolloch, Peter Mohn, Oliver Gutfleisch, Heiko Wende, Rossitza Pentcheva

Sessions

MA 2 09:30 — 12:15 HSZ 01
Focus Session: Antiferromagnetic Spintronics

MA 3 09:30 — 12:45 HSZ 101
Magnetic Textures: Statics and experimental imaging

MA 4 09:30 — 13:00 HSZ 204
Transport: Topological Insulators (jointly with DS, MA, HL, O)

MA 5 09:30 — 12:15 HSZ 401
Magnetization/Demagnetization Dynamics

MA 6 09:30 — 11:45 HSZ 403
Magnetic Instrumentation and Characterisation

MA 7 10:00 — 13:00 MER 02
Analytical Electron Microscopy: SEM and TEM-based Material Analysis

MA 8 10:30 — 12:10 HSZ 04
SKM Dissertation Prize 2017

MA 9 15:00 — 18:00 HSZ 02
Novel Functionality and Topology-Driven Phenomena in Ferroics and Correlated Electron Systems (DF with MA, KR, MI, TT and DS)

MA 10 15:00 — 18:30 HSZ 04
Caloric Effects in Ferromagnetic Materials

MA 11 15:00 — 17:00 HSZ 101
INNOMAG e.V. Dissertationspreis und Diplom-/Masterpreis 2017

MA 12 15:00 — 18:15 HSZ 204
Transport: Graphene and Carbon Nanostructures (jointly with DY, DS, HL, MA, O)

MA 13 15:00 — 18:00 HSZ 304
Transport: Topological Phases (jointly with DS, MA, HL, O)

MA 14 15:00 — 17:30 HSZ 401
Magnetization / Demagnetization Dynamics II

MA 15 15:00 — 18:30 HSZ 403
Magnetic Heuslers, Half-metals and Oxides (jointly with TT)

MA 16 17:30 — 18:45 HSZ 401
Spin Dynamics: Magnetic relaxation and Gilbert Damping

Microprobes Division (MI)

Invited Talks

MI 1.1 10:00 — 10:30 MER 02
Point-group sensitive interpretation of EBSD patterns, and the impact of channeling-in and channeling-out of electrons
•Gert Nolze, Aimo Winkelmann

MI 1.8 12:15 — 12:45 MER 02
Microstructural Characterisation of non-metallic precipitates in silicon crystallization processes for photovoltaic applications
•Susanne Richter, Martina Werner, Sina Swatek, Christian Hagendorf

Sessions

MI 1 10:00 — 13:00 MER 02
Analytical Electron Microscopy: SEM and TEM-based Material Analysis

MI 2 15:00 — 18:00 HSZ 02
Symposium Novel Functionality and Topology-Driven Phenomena in Ferroics and Correlated Electron Systems (DF with MA, KR, MI, TT and DS)

Metal and Material Physics Division (MM)

Invited Talks, Topical Talks

MM 1.1 09:30 — 10:00 BAR 205
Liquid-liquid transition in metallic melts
•Ralf Busch

MM 3.1 10:15 — 10:45 BAR 205
Tensile strength in ab initio simulations: stability of models with planar defects
•Petr Šesták, Miroslav Černý, Monika Všianská, Mojmír Šob

MM 4.1 10:15 — 10:45 IFW A
Structural transition upon vitrification in viscous metallic liquids
•Andreas Meyer

MM 12.1 15:00 — 15:30 BAR 205
From weakened chemical bonds to materials breakdown: An ab initio perspective
•Mira Todorova

MM 18.1 17:30 — 18:00 BAR 205
Experimental investigations on the relationship between crystallographic character of grain boundaries and their functional and mechanical properties in various engineering materials.
•Stefan Zaefferer, Dayong An, Zhangqi Wang, Fady Archie, Guillaume Stechmann

Sessions

MM 1 09:30 — 10:00 BAR 205
Invited talk Busch

MM 2 09:30 — 12:15 HSZ 02
SYLI: Symposium Interfacial Challenges in Solid-State Li Ion Batteries – Invited talks

MM 3 10:15 — 11:30 BAR 205
Topical Session: Interface-Controlled Microstructures: Mechanical Properties and Mechano-Chemical Coupling – Segregation and Embrittlement I

MM 4 10:15 — 11:30 IFW A
Topical session: Dynamics, relaxation and deformation in deeply supercooled metallic liquids and glasses I – Structural Transitions

MM 5 10:15 — 11:30 IFW B
Computational Materials Modelling: Materials at finite temperatures

MM 6 10:15 — 11:15 IFW D
Structural Materials

MM 7 10:30 — 13:00 GER 38
Electronic Structure Theory: New Concepts and Developments in Density Functional Theory and Beyond – I

MM 8 11:45 — 13:15 BAR 205
Topical session: Interface-Controlled Microstructures: Mechanical Properties and Mechano-Chemical Coupling – Segregation and Embrittlement II

MM 9 11:45 — 13:15 IFW A
Topical session: Dynamics, relaxation and deformation in deeply supercooled metallic liquids and glasses II – Undercooled Melts

MM 10 11:45 — 13:15 IFW B
Computational Materials Modelling – Accelerated Approaches

MM 11 11:45 — 13:30 IFW D
Biomaterials

MM 12 15:00 — 15:30 BAR 205
Invited talk Todorova

MM 13 15:00 — 18:15 GER 38
Electronic Structure Theory: New Concepts and Developments in Density Functional Theory and Beyond – II

MM 14 15:45 — 17:15 BAR 205
Topical session: Interface-Controlled Microstructures: Mechanical Properties and Mechano-Chemical Coupling – Electro- and mechno-chemical coupling

MM 15 15:45 — 16:45 IFW A
Symposium SYLI: Interfacial Challenges in Solid-State Li Ion Batteries – Interface-dominated behaviour

MM 16 15:45 — 16:45 IFW B
Computational Materials Modelling – Novel Materials

MM 17 15:45 — 17:00 IFW D
Functional Materials I

MM 18 17:30 — 18:45 BAR 205
Topical session: Interface-Controlled Microstructures: Mechanical Properties and Mechano-Chemical Coupling – Experimental Characterisation

MM 19 17:15 — 18:00 IFW A
SYLI: Symposium Interfacial Challenges in Solid-State Li Ion Batteries – sulphate- and phosphate-based electrolytes

MM 20 17:00 — 18:15 IFW B
Computational Materials Modelling – Defect structure and formation

MM 21 17:15 — 18:45 IFW D
Functional Materials II

MM 22 19:00 — 20:00 P4
Poster session I

Surface Science Division (O)

Invited Talks

O 1.1 09:30 — 10:15 TRE Phy
Electron Spin Resonance of single atoms on surfaces
•Andreas Heinrich

O 10.1 15:00 — 15:45 TRE Phy
Overview of the development of ultrafast scanning tunneling microscopy
Dominik Peller, Tyler L. Cocker, Ping Yu, Rupert Huber, •Jascha Repp

O 13.1 15:00 — 15:30 GER 38
Towards efficient orbital-dependent density functionals for weak and strong correlation
•Igor Ying Zhang, Patrick Rinke, John P. Perdew, Matthias Scheffler

Sessions

O 1 09:30 — 10:15 TRE Phy
Overview Talk: Andreas Heinrich

O 2 09:30 — 12:15 HSZ 02
Symposium Interfacial Challenges in Solid-State Li Ion Batteries

O 3 10:30 — 13:00 TRE Phy
Scanning Probe Techniques: Method Development I

O 4 10:30 — 13:00 TRE Ma
Plasmonics and Nanooptics I: Light-Matter Interactions

O 5 10:30 — 13:00 WIL A317
Organic-Inorganic Hybrid Systems and Organic Films I

O 6 10:30 — 13:00 GER 38
Electronic Structure Theory: New Concepts and Developments in Density Functional Theory and Beyond – I

O 7 10:30 — 12:45 WIL C107
Electronic Structure of Surfaces: Magnetism and Spin Phenomena

O 8 10:30 — 13:00 REC/PHY C213
2D Materials Beyond Graphene I

O 9 10:30 — 13:00 WIL C307
Solid-Liquid Interfaces: Structure, Spectroscopy I

O 10 15:00 — 15:45 TRE Phy
Overview Talk: Jascha Repp

O 11 15:00 — 16:45 TRE Ma
Plasmonics and Nanooptics II: Light-Matter Interaction

O 12 15:00 — 16:45 WIL A317
Organic-Inorganic Hybrid Systems and Organic Films II

O 13 15:00 — 18:15 GER 38
Electronic Structure Theory: New Concepts and Developments in Density Functional Theory and Beyond – II

O 14 15:00 — 17:30 WIL C107
Electronic Structure of Surfaces: Magnetism and Spin Phenomena II

O 15 15:00 — 16:15 WIL B321
Solid-Liquid Interfaces: Structure, Spectroscopy II

O 16 15:45 — 16:45 IFW A
SYLI: Interfacial Challenges in Solid-State Li Ion Batteries – Interface-dominated behaviour

O 17 15:45 — 18:00 TRE Phy
Scanning Probe Techniques: Method Development II

O 18 16:00 — 17:30 WIL C307
Semiconductor Substrates: Structure, Epitaxy and Growth

O 19 16:00 — 18:30 REC/PHY C213
2D Materials Beyond Graphene II

O 20 16:30 — 18:15 WIL B321
Solid-Liquid Interfaces: Reactions and Electrochemistry – Experiment I

O 21 17:00 — 18:30 TRE Ma
Plasmonics and Nanooptics III: Light-Matter Interaction

O 22 17:00 — 18:30 WIL A317
Organic-Inorganic Hybrid Systems and Organic Films III

O 23 17:15 — 18:00 IFW A
SYLI: Symposium Interfacial Challenges in Solid-State Li Ion Batteries – sulphate- and phosphate-based electrolytes

O 24 17:30 — 18:30 WIL C307
Semiconductor Substrates: Adsorption

Physics of Socio-economic Systems Division (SOE)

Prize Talk, Invited Talk, Topical Talk

SOE 1.1 09:30 — 10:00 GÖR 226
Quantifying the evolution of individual scientific impact
•Roberta Sinatra

SOE 5.1 15:00 — 15:45 HSZ 01
Complexity in Economics and Finance
•Cees Diks

SOE 5.2 16:00 — 16:45 HSZ 01
Climate Change and Global Governance in an Uncertain World
•Francisco C. Santos (Young Scientist Award for Socio- and Econophysics 2017), Vítor V. Vasconcelos, Simon A. Levin, Jorge M. Pacheco

Sessions

SOE 1 09:30 — 10:00 GÖR 226
Scientific Impact and Models for Growth of Science (Topical Talk Roberta Sinatra)

SOE 2 10:00 — 11:15 GÖR 226
Social Systems I

SOE 3 11:15 — 12:15 GÖR 226
Financial Models and Risk Management I

SOE 4 14:00 — 14:45 HSZ 02
Plenary Talk Stuart Kauffman

SOE 5 15:00 — 17:00 HSZ 01
YSA Award Session: Young Scientist Award for Socio- and Econophysics 2017

SOE 6 17:00 — 20:00 P2-OG4
Poster

Low Temperature Physics Division (TT)

Invited Talks

TT 1.1 09:30 — 10:00 HSZ 03
Herbertsmithite and the Search for the Quantum Spin Liquid
•Michael Norman

TT 1.2 10:00 — 10:30 HSZ 03
Anisotropic Magnetism and Spin Gap in α-$RuCl_3$
•Bernd Büchner

TT 1.3 10:30 — 11:00 HSZ 03
The Fate of Spinons in Quantum Critical Mott Systems
•Vladimir Dobrosavljevic

TT 1.4 11:15 — 11:45 HSZ 03
Breakdown of Hooke's Law of Elasticity at the Mott Critical Endpoint in an Organic Conductor
•Elena Gati, M. Garst, R.S. Manna, U. Tutsch, B. Wolf, L. Bartosch, T. Sasaki, H. Schubert, J.A. Schlueter, M. Lang

TT 1.5 11:45 — 12:15 HSZ 03
The Widom Line in Pristine Mott Insulators: Dynamical Properties of Quantum Spin Liquids
•Andrej Pustogow, Simone Fratini, Tsung-Han Lee, Vladimir Dobrosavljevic, Martin Dressel

TT 1.6 12:15 — 12:45 HSZ 03
Toward Understanding the Complex Magnetism in Kitaev Spin-Liquid Candidates
•Stephen Winter, Kira Riedl, Roser Valenti

TT 2.6 11:00 — 11:30 HSZ 103
The Echo of Superconductivity: Higgs Oscillations of Superconductors in Non-Equilibrium
•Dirk Manske

TT 12.9 17:15 — 17:45 HSZ 03
U(1) Quantum Spin Liquid Ground State in the Triangular Antiferromagnet $YbMgGaO_4$
•Yuesheng Li

TT 14.6 16:30 — 17:00 HSZ 201
Multi-Terminal Josephson Junctions as Topological Matter
•Julia S. Meyer

Sessions

TT 1 09:30 — 12:45 HSZ 03
Focus Session: Frustration in Mott Insulators and Mott Criticality

TT 2	09:30 — 12:45	HSZ 103
	Superconductivity: Properties and Electronic Structure 1	
TT 3	09:30 — 13:15	HSZ 201
	Transport: Quantum Dots, Quantum Wires, Point Contacts	
TT 4	09:30 — 13:00	HSZ 204
	Transport: Topological Insulators (jointly with DS, MA, HL, O)	
TT 5	09:30 — 13:00	HSZ 304
	Correlated Electrons: (General) Theory 1	
TT 6	09:30 — 12:45	POT 81
	Focus Session: Two-Dimensional Materials I (joint session DS, HL, TT, organised by HL)	
TT 7	09:30 — 13:00	POT 151
	Spintronics I (joint session DS, HL, MA, TT, organised by HL)	
TT 8	10:30 — 13:00	GER 38
	Electronic-Structure Theory: New Concepts and Developments in Density Functional Theory and Beyond – I (joint session DS, HL, MA, MM, O, TT, organised by O)	
TT 9	14:45 — 18:15	POT 81
	Focus Session: Two-Dimensional Materials II (joint session DS, HL, TT, organised by HL)	
TT 10	14:45 — 17:00	POT 151
	Spintronics II (joint session DS, HL, MA, TT, organised by HL)	
TT 11	15:00 — 18:00	HSZ 02
	SYCE: Novel Functionality and Topology-Driven Phenomena in Ferroics and Correlated Electron Systems (joint symposium DF, DS, KR, MA, MI, TT, organised by DS)	
TT 12	15:00 — 18:15	HSZ 03
	Correlated Electrons: Frustrated Magnets – General 1	
TT 13	15:00 — 18:15	HSZ 103
	Superconductivity: Fe-based Superconductors – 122	

TT 14 15:00 — 18:15 HSZ 201
Superconductivity: Tunnelling, Josephson Junctions, SQUIDs 1

TT 15 15:00 — 18:15 HSZ 204
Transport: Graphene and Carbon Nanostructures (jointly with DY, DS, HL, MA, O)

TT 16 15:00 — 18:00 HSZ 304
Transport: Topological Phases (jointly with DS, MA, HL, O)

TT 17 15:00 — 18:30 HSZ 403
Magnetic Heuslers, Half-Metals and Oxides (joint session MA, TT, organised by MA)

TT 18 15:00 — 18:15 GER 38
Electronic-Structure Theory: New Concepts and Developments in Density Functional Theory and Beyond – II (joint session DS, HL, MA, MM, O, TT, organised by O)

TT 19 15:00 — 19:00 P2-EG
Poster Session: Correlated Electrons 1

TT 20 15:00 — 19:00 P2-OG1
Poster Session: Correlated Electrons 2

Vacuum Science and Technology Division (VA)

Invited Talks

VA 1.1 09:00 — 09:45 HSZ 301
Assessment of a Pressure Gauge Filament for Neutral Gas Density Measurement using Alternating Current as Source Power
•Nikola Jaksic, Hans Meister, Andrea Scarabosio

VA 2.1 11:00 — 11:45 HSZ 301
Commissioning of the complete KATRIN Vacuum System
•Joachim Wolf, KATRIN Collaboration

VA 3.1 13:30 — 14:15 HSZ 301
High speed massive matter injection in ultra-high vacuum environment for magnetic fusion devices
•Mathias Dibon, Peter Lang, Gabriella Pautasso, Albrecht Herrmann, Vitus Mertens, Rudolf Neu, Bernhard Ploeckl, Volker Rohde

Sessions

VA 1 09:00 — 10:45 HSZ 301
Vacuum Generation and Measurement

VA 2 11:00 — 12:15 HSZ 301
Large Vacuum Systems

VA 3 13:30 — 14:45 HSZ 301
Vacuum Physics

VA 4 14:45 — 16:00 P2-OG3
Poster Session

16:00 — 16:30 HSZ 301
Annual General Meeting of the Vacuum Science and Technology Division

Working Group on Accelerator physics (AKBP)

Session

AKBP 1 15:00 — 18:00 MOL 213
New Accelerator Concepts I

19:00 Foyer HSZ
Free Beer (for registered participants only)

Evening Talk (Entrance free)

PV VII 20:00 — 21:00 HSZ 01
Magnetresonanz-Tomografie in Echtzeit
•*Jens Frahm*

Tuesday, March 21, 2017

Plenary Talk

PV VIII 08:30 — 09:15 HSZ 01
Surface and tip-Enhanced Raman spectroscopy: From single molecule spectroscopy to angstrom-scale spatial resolution and femtosecond time resolution
•Richard Van Duyne

Prize Talks

PV IX 13:15 — 13:45 HSZ 01
Topological Insulators: a New State of Matter
•Laurens W. Molenkamp
(Laureate of the Stern-Gerlach-Medaille 2017)

PV XI 13:15 — 13:45 HSZ 03
Mikroelektronische Systeme zur Erzeugung und Charakterisierung eines Hochvakuums
•Moritz Kopetzki
(Laureate of the Georg-Simon-Ohm-Prize 2017)

Lunch Talk

PV X 13:15 — 13:45 HSZ 02
Als Physiker in einem Maschinenbau-Unternehmen
•Monika Mattern-Klosson

Special Plenary Session with Prize Ceremony

PV XII 17:30 — 18:15 HSZ 01
Molecular semiconductors for LEDs and solar cells: designing around the Coulomb interaction
•Richard Friend (Ceremonial Lecturer)

Symposium Bioinspired Functional Materials: From Nature's Nanoarchitectures to Nanofabricated Designs (SYBM)

Invited Talks

SYBM 1.1 09:30 — 10:00 HSZ 02
New twists in biological photonics: circular polarisation and beyond.
•Pete Vukusic, Luke McDonald, Ewan Finlayson

SYBM 1.2 10:00 — 10:30 HSZ 02
Bio-inspired materials and structures for technology and architecture
•*Thomas Speck*

SYBM 1.3 10:30 — 11:00 HSZ 02
Cellulose bio-inspired hierarchical structures
•*Silvia Vignolini*

SYBM 1.4 11:15 — 11:45 HSZ 02
Strong Flexible Bioenabled Nanocomposites for Sustainable Sensing
•*Vladimir Tsukuruk*

SYBM 1.5 11:45 — 12:15 HSZ 02
3D laser nano-printing of rationally designed materials
•*Martin Wegener*

Session

SYBM 1 09:30 — 12:15 HSZ 02
Bioinspired Functional Materials: From Nature‘s Nanoarchitectures to Nanofabricated Designs

Symposium Interfacial Challenges in Solid-State Li Ion Batteries (SYLI)

Sessions

SYLI 4 10:15 — 11:30 IFW A
NMR studies

SYLI 5 11:45 — 12:45 IFW A
Structure – property relationships I

Biological Physics Division (BP)

Invited Talks

BP 13.1 09:30 — 10:00 HÜL 386
X-ray imaging of Cells and Tissues
•*Tim Salditt*

BP 14.1 09:30 — 10:00 SCH A251
Laminar mixing in tubular networks of plasmodial slime moulds
•*Marcus Hauser*

BP 16.1 11:30 — 12:00 HÜL 386
Control on the nanoscale with DNA origami
•*Tim Liedl*

Sessions

BP 11 09:30 — 12:15 HSZ 02
Bioinspired Functional Materials: From Nature's Nanoarchitectures to Nanofabricated Designs (Joint Symposium CPP/BP/MM/DF/DY/MI)

BP 12 09:30 — 13:00 HÜL 186
Microswimmers I (Joint Session DY/BP)

BP 13 09:30 — 11:00 HÜL 386
Bioimaging and Spectroscopy II

BP 14 09:30 — 13:00 SCH A251
Physics of Physarum polycephalum and Other Slime Molds – Joint Focus Session (BP/DY) organised by Hans-Günther Döbereiner

BP 15 11:30 — 13:00 ZEU 255
Colloids and Complex Fluids I (Joint Session CPP/BP/DY)

BP 16 11:30 — 12:30 HÜL 386
Biotechnology and Bioengineering

BP 17 14:30 — 15:45 HÜL 186
Microswimmers II (Joint Session DY/BP)

BP 18 14:00 — 16:00 ZEU 118
Statistical Physics in Biological Systems II (Joint Session DY/BP)

BP 19 14:00 — 16:00 P1A
Posters – Computational Biophysics

BP 20 14:00 — 16:00 P1A
Posters – Physics of the Genesis of Life (Focus Session)

BP 21 14:00 — 16:00 P1A
Posters – Membranes and Vesicles

BP 22 14:00 — 16:00 P1A
Posters – Biomaterials and Biopolymers

BP 23 14:00 — 16:00 P1A
Posters – Statistical Physics of Biological Systems

BP 24 14:00 — 16:00 P1A
Posters – Protein Structure and Dynamics

BP 25 14:00 — 16:00 P2-EG
Posters – Cytoskeletal Filaments

BP 26 14:00 — 16:00 P2-EG
Posters – Cell Adhesion

BP 27 14:00 — 16:00 P2-EG
Posters – Microswimmers

BP 28 14:00 — 16:00 P2-EG
Posters – Cell Migration Contraction

BP 29 14:00 — 16:00 P2-EG
Posters – Multi-Cellular Systems

BP 30 14:00 — 16:00 P2-OG1
Posters – Neurosciences

BP 31 14:00 — 16:00 P2-OG1
Posters – Biotechnology and Bioengineering

BP 32 14:00 — 16:00 P2-OG1
Posters – DNA/RNA

BP 33 14:00 — 16:00 P2-OG1
Posters – Systems Biology & Gene Expression and Signalling

BP 34 14:00 — 16:00 P2-OG1
Posters – Physics of Physarum polycephalum and Other Slime Molds (Focus Session)

BP 35 14:00 — 16:00 P2-OG1
Posters – Physics of Parasites (Focus Session)

Chemical and Polymer Physics Division (CPP)

Invited Talks

CPP 20.1 09:30 — 10:00 ZEU 222
Investigation of hybrid organic/inorganic perovskite systems and interfaces by photoelectron spectroscopy
•*Selina Olthof*

CPP 22.7 11:15 — 11:45 ZEU 250
Structure/dynamics interplay in interfacial layers: how adsorption influences thermal glass transition and segmental relaxation
•*Simone Napolitano*

CPP 22.10 12:15 — 12:45 ZEU 250
Molecular-level framework for the dynamic mechanical response and yielding of polymer glasses
•*Alessio Zaccone, Vladimir Palyulin, Chris Ness, Robert Elder, Rico Milkus, Timothy Sirk*

CPP 25.1 14:00 — 14:30 ZEU 222
Ultrafast transient absorption spectroscopy of organic-inorganic hybrid perovskites on mesoporous titanium dioxide in contact with hole transport materials
•*Thomas Lenzer*

Sessions

CPP 19 09:30 — 12:15 HSZ 02
Symposium on Bioinspired Functional Materials: From Nature's Nanoarchitectures to Nanofabricated Designs

CPP 20 09:30 — 12:30 ZEU 222
Fundamentals of Perovskite Photovoltaics III (joint session CPP/DS/HL)

CPP 21 09:30 — 12:45 ZEU 260
Organic Electronics and Photovoltaics III: Mobile and Trapped Charges (joint session CPP/DS/HL, organised by CPP)

CPP 22 09:30 — 12:45 ZEU 250
Polymer Networks and Dynamics II: Structure and Dynamics

CPP 23 09:30 — 13:15 POT 251
Organic Semiconductors (joint session CPP/DS/HL, organised by HL)

CPP 24 11:30 — 13:00 ZEU 255
Colloids and Complex Fluids I (joint session BP/CPP/DY, organised by CPP)

CPP 25 14:00 — 16:00 ZEU 222
Fundamentals of Perovskite Photovoltaics IV (joint session CPP/DS/HL)

CPP 26 14:00 — 16:00 ZEU 260
Molecular Electronics and Excited State Properties

CPP 27 14:00 — 15:45 ZEU 114
Photoswitchable Materials

CPP 28 14:00 — 15:45 ZEU 160
Focus: Soft Particles in Flows III (joint focus session CPP/DY)

CPP 29 14:00 — 16:00 ZEU 250
Polymer Networks and Dynamics III: Mechanical Properties

Physics Education Division (DD)

Prize Talks, Invited Talk

DD 11.1 10:00 — 10:20 HSZ 01
Astronomie und Raumfahrt als Kontextbausteine im Physikunterricht der Oberstufe
•Matthias Borchardt (Laureate of the DPG Prize for Excellent Physics-Teaching at Schools 2016)

DD 11.2 10:20 — 10:40 HSZ 01
Motivation Physik – Hürden auf dem Weg zum Physikstudium
•Beate Brase (Laureate of the DPG Prize for Excellent Physics-Teaching at Schools 2016)

DD 11.3 10:40 — 11:00 HSZ 01
Jugendliche für Astronomie begeistern – Aus dem Alltag einer Astronomie-AG
•Rita Isenmann (Laureate of the DPG Prize for Excellent Physics-Teaching at Schools 2016)

DD 11.4 11:00 — 11:30 HSZ 01
Uni(versum) für alle – Halbe Heidelberger Sternstunden
•Joachim Wambsganß
(Preisträger des Georg-Kerschensteiner-Preises 2017)

DD 12.1 13:00 — 14:00 GER 38
Von der individuellen Förderung zur Inklusion
•Insa Melle

Sessions

DD 11 10:00 — 11:30 HSZ 01
Preisträgervorträge

DD 12 13:00 — 14:00 GER 38
Hauptvortrag 2

DD 13 14:00 — 15:40 GER 39
Lehr- und Lernforschung 2

DD 14 14:00 — 15:40 GER 52
Neue Konzepte 2

DD 15 14:00 — 15:40 GER 54
Neue Medien

DD 16 14:00 — 15:40 GER 009
Anregungen aus dem Unterricht für den Unterricht 2

16:00 — 18:00 GER 38
Mitgliederversammlung des Fachverbandes Didaktik der Physik

Dielectric Solids Division (DF)

Topical Talks

DF 7.1 09:30 — 10:00 GER 37
Synthesis of large-area single-crystal diamond by heteroepitaxy for application as dielectric window material
•Matthias Schreck, Stefan Gsell, Martin Fischer

DF 7.3 10:20 — 10:50 GER 37
Design, materials composition and manufacturing of components for advanced modular gyrotron prototypes
•Sebastian Ruess, Gaetano Aiello, Gerd Gantenbein, Tomasz Rzesnicki, Theo Scherer, Dirk Strauss, Manfred Thumm, Jörg Weggen, John Jelonnek

DF 7.4 11:10 — 11:40 GER 37
Dielectric diamond window for the ITER EC H&CD Upper Launcher: design, analysis and qualification
•Gaetano Aiello, Mario Gagliardi, Giovanni Grossetti, Francesco Mazzocchi, Andreas Meier, Gabriella Saibene, Sabine Schreck, Peter Spaeh, Dirk Strauss, Alessandro Vaccaro, Theo Scherer

DF 8.1 09:30 — 10:00 WIL B321
Room temperature skyrmions and robust metastable skyrmion states in $Co_8Zn_8Mn_4$
•Jonathan White, Kosuke Karube, Nicole Reynolds, Jorge Gavilano, Hiroshi Oike, Akiko Kikkawa, Fumitaka Kagawa, Yusuke Tokunaga, Henrik Ronnow, Yoshinori Tokura, Yasujiro Taguchi

Sessions

DF 6 09:30 — 12:15 HSZ 02
SYBM – Bioinspired Functional Materials: From Nature's Nanoarchitectures to Nanofabricated Designs (CPP with BP, MM, DF, DY und MI)

DF 7 09:30 — 12:20 GER 37
Focus: Microwave and THz Properties, Developments and Applications of Dielectric Materials

DF 8 09:30 — 13:30 WIL B321
Ferroics – Domains, Domain Walls and Skyrmions I

DF 9 14:00 — 16:00 P1C
Poster Session

Thin Films Division (DS)

Topical Talks

DS 20.1 09:30 — 10:00 CHE 89
Driving nanophotonics to the atomic scale
•Javier Aizpurua

DS 20.2 10:00 — 10:30 CHE 89
Transverse and Longitudinal Resonances in Plasmonic Gold Tapers
Surong Guo, Nahid Talebi, Wilfried Sigle, Ralf Vogelgesang, Gunther Richter, Martin Esmann, Simon F. Becker, Christoph Lienau, •Peter A. van Aken

DS 20.3 10:30 — 11:00 CHE 89
Nanoimaging and control of polaritons in 2D materials
•Rainer Hillenbrand

DS 20.4 11:15 — 11:45 CHE 89
Switchable infrared nanophotonic elements enabled by phase-change materials
•Thomas Taubner

DS 20.5 11:45 — 12:15 CHE 89
Nonlocal response in plasmonic nanoparticles: How much quantum?
•N. Asger Mortensen

DS 20.6 12:15 — 12:45 CHE 89
Short-range plasmonics
•Harald Giessen

Sessions

DS 18 09:30 — 11:45 HSZ 201
Transport: Topological Semimetals 1 (jointly with MA/TT)

DS 19 09:30 — 12:30 ZEU 222
Fundamentals of Perovskite Photovoltaics III (jointly with CPP/HL)

DS 20 09:30 — 12:45 CHE 89
Focussed Session: Frontiers in Exploring and Applying Plasmonic Systems II (Joint Session of CPP, DS, HL, MM, and O, organised by DS)

DS 21 09:30 — 13:00 CHE 91
Thin Film Characterisation: Structure Analysis and Composition II

DS 22 09:30 — 13:15 POT 51
Two-dimensional materials III (jointly with HL/TT)

DS 23 09:30 — 13:15 POT 251
Organic Semiconductors (jointly with CPP/HL)

DS 24 14:00 — 16:00 ZEU 222
Fundamentals of Perovskite Photovoltaics IV (jointly with CPP/HL)

DS 25 15:30 — 16:00 WIL C307
Gaede-Prize Talk (jointly with O)

DS 26 18:30 — 20:30 P1C
Metallic Nanowires on Semiconductor Surfaces (jointly with O)

DS 27 18:30 — 20:30 P2-EG
2D Materials beyond Graphene (jointly with O)

Dynamics and Statistical Physics Division (DY)

Invited Talks

DY 14.1 09:30 — 10:00 HÜL 186
Tactic Response of Synthetic Microswimmers in Gravitational and Optical Fields
•*Clemens Bechinger*

DY 14.7 11:30 — 12:00 HÜL 186
Emergent structures in actuated magnetic and active colloidal suspensions
•*Ignacio Pagonabarraga*

DY 16.1 09:30 — 10:00 ZEU 118
The Geostrophic Branch of Rotating Convection
•*Stephan Stellmach, Meredith Plumley, Keith Julien, Philippe Marti*

DY 16.7 11:30 — 12:00 ZEU 118
Convection rolls and fingers in double diffusive convection
•*Andreas Tilgner*

DY 20.1 14:00 — 14:30 ZEU 160
Particle based simulations of viscoelastic Soft Matter
•Wim Briels

Sessions

DY 14 09:30 — 13:00 HÜL 186
Microswimmers I (joint session DY/BP)

DY 15 09:30 — 13:15 ZEU 160
Quantum Dynamics, Decoherence, Quantum Information

DY 16 09:30 — 13:15 ZEU 118
Focus: Fundamental aspects of turbulent convection

DY 17 09:30 — 13:00 SCH A251
Physics of Physarum polycephalum and Other Slime Molds – Joint Focus Session (BP/DY) organised by Hans-Günther Döbereiner

DY 18 10:00 — 13:00 ZEU 147
Brownian Motion / Noise (joint session DY/ TT)

DY 19 11:30 — 13:00 ZEU 255
Colloids and Complex Fluids I (joint session BP/CPP/DY, organised by CPP)

DY 20 14:00 — 15:45 ZEU 160
Soft Particles in Flows III (Focus session, joint DY/CPP)

DY 21 14:00 — 16:00 ZEU 118
Statistical Physics in Biological Systems (joint session DY/ BP/CPP)

DY 22 14:00 — 16:00 P1A
Posters – Statistical Physics of Biological Systems

DY 23 14:30 — 15:45 HÜL 186
Microswimmers II (joint session DY/BP)

DY 24 14:30 — 15:45 ZEU 147
Pattern Formation / Reaction-Diffusion I

DY 25 18:15 — 21:00 P3
Posters – Soft Particles, Microswimmers, Microfluidics

DY 26 18:15 — 21:00 P3
Posters – Statistical Physics, Stochastic Thermodynamics

DY 27 18:15 — 21:00 P3
Posters – Statistical Physics Biological Systems

DY 28 18:15 — 21:00 P3
Posters – Dynamics of Many-Body Systems

History of Physics Division (GP)

Invited Talks

GP 4.1 09:30 — 10:15 HSZ 105
The Atomic Gift
•*Jahnavi Phalkey*

GP 6.1 14:00 — 14:45 HSZ 105
The Joint Institute for Nuclear Research and Cold War science diplomacy
•*Karl Hall*

Sessions

GP 4 09:30 — 11:15 HSZ 105
Instrumente

GP 5 11:30 — 13:00 HSZ 105
Freie Sektion II

GP 6 14:00 — 15:45 HSZ 105
Orte und Theorien

Semiconductor Physics Division (HL)

Invited Talks

HL 33.1 09:30 — 10:00 POT 81
Deterministic Single Quantum Dot Devices: Building Blocks for Photonic Quantum Networks
•*Stephan Reitzenstein*

HL 34.7 11:30 — 12:00 POT 51
Influence of dark states on excitonic spectra of transition metal dichalcogenides
•Malte Selig, Dominik Christiansen, Gunnar Berghäuser, Ermin Malic, Andreas Knorr

HL 35.1 09:30 — 10:00 POT 151
Edge conduction in the 2D topological insulator candidate InAs/GaSb
•Susanne Mueller, Matija Karalic, Christopher Mittag, Lars Tiemann, Thomas Tschirky, Quansheng Wu, Alexey A. Soluyanov, Atin Nath Pal, Christophe Charpentier, Matthias Troyer, Werner Wegscheider, Klaus Ensslin, Thomas Ihn

HL 35.4 10:30 — 11:00 POT 151
Progress in Edge Channel Transport of Two-Dimensional Topological Insulators
•Hartmut Buhmann

HL 35.5 11:30 — 12:00 POT 151
Transport and capacitance in HgTe-based topological insulators
•Dieter Weiss

HL 35.7 12:15 — 12:45 POT 151
Giant Spin-Orbit Splitting in Inverted InAs/GaSb Double Quantum Wells
•Fabrizio Nichele, Morten Kjaergaard, Henri J. Suominen, Rafal Skolasinski, Michael Wimmer, Binh-Minh Nguyen, Andrey A. Kiselev, Wei Yi, Marko Sokolich, Michael J. Manfra, Fanming Qu, Arjan J. A. Beukman, Leo P. Kouwenhoven, Charles M. Marcus

Sessions

HL 29 09:30 — 13:15 HSZ 103
Transport: Quantum Coherence and Quantum Information Systems – Theory (jointly with MA, HL)

HL 30 09:30 — 12:30 ZEU 222
Fundamentals of Perovskite Photovoltaics III (joint session CPP/DS/HL)

HL 31 09:30 — 12:45 ZEU 260
Organic Electronics and Photovoltaics III: Mobile and Trapped Charges

HL 32 09:30 — 12:45 CHE 89
Focussed Session: Frontiers in Exploring and Applying Plasmonic Systems I (Joint Session of CPP, DS, HL, MM, and O, organised by DS)

HL 33 09:30 — 13:00 POT 81
Quantum Dots: Optical Properties I

HL 34 09:30 — 13:15 POT 51
Two-dimensional materials III (joined session with TT)

HL 35 09:30 — 12:45 POT 151
Focus Session: Topological Insulators on Coupled Quantum Wells (joined session with TT)

HL 36 09:30 — 13:15 POT 251
Organic Semiconductors (joined session with CPP, DS)

HL 37 09:30 — 12:30 POT 112
III-V Semiconductors

HL 38 09:30 — 11:15 POT 06
Zinc Oxide

HL 39 10:30 — 13:00 TRE Ma
Plasmonics and Nanooptics IV: Light-Matter Interaction

HL 40 10:30 — 13:00 GER 38
Electronic-Structure Theory: New Concepts and Developments in Density Functional Theory and Beyond – III

HL 41 11:45 — 13:00 POT 06
Nitrides: Preparation

HL 42 14:00 — 16:00 ZEU 222
Fundamentals of Perovskite Photovoltaics IV (joint session CPP/DS/HL)

HL 43 14:00 — 16:00 TRE Ma
Plasmonics and Nanooptics V: Light-Matter Interaction

HL 44 14:45 — 16:00 POT 81
Quantum Dots: Optical Properties II

Crystallography Division (KR)

18:00 — 19:00 HSZ 204
Annual General Meeting of the Crystallography Division

Magnetism Division (MA)

Invited Talks

MA 17.1 09:45 — 10:30 HSZ 04
Frustrated Quantum Magnets: Theory
•Matthias Vojta

MA 17.2 10:30 — 11:15 HSZ 04
Ground State Selection in Quantum Pyrochlore Magnets
•Bruce D. Gaulin

MA 17.3 11:30 — 12:00 HSZ 04
Effects of anisotropic exchange in strong spin-orbit coupled magnets
•Natalia Perkins

MA 17.4 12:00 — 12:30 HSZ 04
Numerical Approaches to Frustrated Quantum Magnets
•Stephan Rachel

MA 17.6 13:45 — 14:15 HSZ 04
Nuclear Probes on Frustrated Magnets
•Philippe Mendels

MA 17.7 14:15 — 14:45 HSZ 04
Complex spin structures and multifunctional magnetism
•Vivien Zapf

MA 22.1 09:30 — 10:00 HSZ 401
Tuning the zero-point spin-fluctuations of single adatoms
•Julen Ibañez-Azpiroz

Sessions

MA 17 09:30 — 15:00 HSZ 04
PhD Symposium: Quantum Magnets: Frustration and Topology in Experiment and Theory (jointly with Young DPG (jDPG))

MA 18 09:30 — 13:15 HSZ 103
Transport: Quantum Coherence and Quantum Information Systems – Theory (jointly with MA, HL)

MA 19 09:30 — 11:45 HSZ 201
Transport: Topological Semimetals 1 (jointly with DS, MA, HL, O)

MA 20 09:30 — 13:00 HSZ 301
Bio- and Molecular Magnetism

MA 21 09:30 — 13:00 HSZ 304
Correlated Electrons: Frustrated Magnets – Strong Spin-Orbit Coupling 1

MA 22 09:30 — 12:30 HSZ 401
Surface Magnetism (Joint Session with O)

MA 23 09:30 — 12:15 HSZ 403
Spin Dynamics and Transport: Ultrafast Effect

MA 24 09:30 — 12:20 GER 37
Focus: Microwave and THz Properties, Developments and Applications of Dielectric Materials

MA 25 09:30 — 13:30 WIL B321
Ferroics – Domains, Domain Walls and Skyrmions I

MA 26 14:00 — 16:00 HSZ 101
Thin Films: Magnetic Coupling Phenomena / Exchange Bias

MA 27 14:00 — 15:45 HSZ 301
Spintronics (incl. Quantum Dynamics)

MA 28 14:00 — 15:45 HSZ 401
Spin Dynamics and Transport: Domain Walls

MA 29 14:00 — 15:15 HSZ 403
Spin dependent Transport Phenomena

MA 30 18:30 — 20:30 P1A
Electronic structure of Surfaces: Magnetism and Spin Phenomena

MA 31 18:30 — 20:30 P2-EG
Ultrafast Electron and Spin Dynamics

Microprobes Division (MI)

Session

MI 3 09:30 — 12:15 HSZ 02
Symposium Bioinspired Functional Materials: From Nature's Nanoarchitectures to Nanofabricated Designs

Metal and Material Physics Division (MM)

Invited Talk, Topical Talk

MM 23.1 09:30 — 10:00 BAR 205
Integration of Grain Boundary Mechanics and Migration
•David Srolovitz, Jian Han, Spencer Thomas, Vaclav Vitek

MM 25.1 10:15 — 10:45 BAR 205
Atomistic Studies on the Role of Interface Curvature on Deformation and Failure of Interface-Controlled Materials
•Erik Bitzek

Sessions

MM 23 09:30 — 10:00 BAR 205
Invited talk Srolovitz

MM 24 09:30 — 12:15 HSZ 02
Bioinspired Functional Materials: From Nature's Nanoarchitectures to Nanofabricated Designs

MM 25 10:15 — 11:30 BAR 205
Topical session: Interface-Controlled Microstructures: Mechanical Properties and Mechano-Chemical Coupling – Structure and Deformation I

MM 26 10:15 — 11:30 IFW A
SYLI: Symposium Interfacial Challenges in Solid-State Li Ion Batteries – NMR studies

MM 27 10:15 — 11:15 IFW B
Computational Materials Modelling Electronic structure approaches

MM 28 10:15 — 11:45 IFW D
Transport I – atomic transport

MM 29 10:30 — 13:00 GER 38
Electronic Structure Theory: New Concepts and Developments in Density Functional Theory and Beyond – III

MM 30 11:45 — 13:00 BAR 205
Topical session: Interface-Controlled Microstructures: Mechanical Properties and Mechano-Chemical Coupling – Structure and Deformation II

MM 31 11:45 — 12:45 IFW A
SYLI: Symposium Interfacial Challenges in Solid-State Li Ion Batteries – Structure – property relationships I

MM 32 11:45 — 13:15 IFW B
Microstructure and Phase Transformations – detection methods

MM 33 12:00 — 13:00 IFW D
Transport II – charge transport

MM 34 18:30 — 20:30 P4
Poster session II

MM 35 18:30 — 20:30 P2-OG4
Electronic Structure Theory: New Concepts and Developments in Density Functional Theory and Beyond

Surface Science Division (O)

Invited Talks

O 25.1 09:30 — 10:15 TRE Phy
Electrochemistry: A new frontier for a theoretical surface scientist
•*Axel Groß*

O 27.1 10:30 — 11:00 TRE Phy
The role of nonadiabatic friction in chemical dynamics at metal surfaces
•*Reinhard Maurer*

O 30.1 10:30 — 11:00 GER 38
Including spin effects in the strong-coupling limit of DFT
•Paola Gori-Giorgi, Juri Grossi, Derk Pieter Kooi, Klaas Giesbertz, Michael Seidl, Aron Cohen, Paula Mori-Sanchez

O 32.1 10:30 — 11:00 WIL C307
Electrical detection of spin-polarized transport on topological insulator via four-probe spectroscopy
•An-Ping Li, Saban Hus, Corentin Durand, Xiaoguang Zhang, Giang Nguyen, Yong Chen

O 32.5 11:45 — 12:15 WIL C307
Probing electron transport with atomic scale precision
•Christian A. Bobisch

O 34.1 10:30 — 11:00 HSZ 101
Self-Assembly at the Liquid/Solid Interface: Playing on the Nanoscale and Taming Molecules
•Manfred Buck

O 36.1 14:00 — 14:30 TRE Phy
Attosecond control of excited electrons and nuclei in gas- and condensed-phase systems
•Thomas Pfeifer

O 36.2 14:30 — 15:00 TRE Phy
Probing ultrafast electron and spin dynamics in momentum, space, and time – chances and opportunities of a surface science end station at ELI-ALPS
•Stefan Mathias

O 36.3 15:00 — 15:30 TRE Phy
Attosecond electron dynamics on surfaces and layered systems
•Reinhard Kienberger

O 36.4 15:30 — 16:00 TRE Phy
Coincidence ARPES on molecules
•Reinhard Doerner

O 38.1 14:00 — 14:30 WIL A317
Tuning excitonic excitations in molecular layers
•Martin Weinelt, Cornelius Gahl

O 40.1 14:00 — 14:30 WIL C307
Performances of the new low temperature ultrahigh vacuum 4 scanning tunneling microscopes
•Christian Joachim, Delphine Sordes, Corentin Durand, We-Hyo Soe, Marek Kolmer

O 43.1 15:30 — 16:00 WIL C307
STM-induced light emission: from molecular LED to sub-nanometric optical microscopy.
•Guillaume Schull
(Laureate of the Gaede-Prize 2017)

Sessions

O 25 09:30 — 10:15 TRE Phy
Overview Talk: Axel Groß

O 26 10:15 — 11:30 IFW A
SYLI: Symposium Interfacial Challenges in Solid-State Li Ion Batteries NMR studies

O 27 10:30 — 12:30 TRE Phy
Surface Dynamics: Theory

O 28 10:30 — 13:00 TRE Ma
Plasmonics and Nanooptics IV: Light-Matter Interaction

O 29 10:30 — 13:00 WIL A317
Organic-Inorganic Hybrid Systems and Organic Films IV

O 30 10:30 — 13:00 GER 38
Electronic Structure Theory: New Concepts and Developments in Density Functional Theory and Beyond – III

O 31 10:30 — 13:00 WIL C107
Oxide and Insulator Surfaces: Structure, Epitaxy and Growth I

O 32 10:30 — 13:00 WIL C307
Focus Session: Charge Transport at Surfaces and Nanostructures with Multi-probe Techniques I

O 33 10:30 — 13:00 REC/PHY C213
Nanostructures at Surfaces: Metals, Oxides and Semiconductors I

O 34 10:30 — 12:15 HSZ 101
Solid-Liquid Interfaces: Reactions and Electrochemistry – Experiment II

O 35 12:15 — 13:15 HSZ 101
Solid-Liquid Interfaces: Reactions and Electrochemistry – Theory I

O 36 14:00 — 16:00 TRE Phy
ELI-ALPS: A New European Light Source for Ultrafast Surface Science

O 37 14:00 — 16:00 TRE Ma
Plasmonics and Nanooptics V: Light-Matter Interaction

O 38 14:00 — 16:00 WIL A317
Organic-Inorganic Hybrid Systems and Organic Films V

O 39 14:00 — 16:00 WIL C107
Oxide and Insulator Surfaces: Structure, Epitaxy and Growth II

O 40 14:00 — 15:15 WIL C307
Focus Session: Charge Transport at Surfaces and Nanostructures with Multi-probe Techniques II

O 41 14:00 — 16:00 REC/PHY C213
Nanostructures at Surfaces: Metals, Oxides and Semiconductors II

O 42 14:00 — 16:00 WIL B321
Solid-Liquid Interfaces: Reactions and Electrochemistry – Theory II

O 43 15:30 — 16:00 WIL C307
Gaede-Prize Talk

O 44 18:30 — 20:30 P1A
Metal Substrates: Structure, Epitaxy and Growth

O 45 18:30 — 20:30 P1A
Organic-Inorganic Hybrid Systems and Organic Films

O 46 18:30 — 20:30 P1A
Electronic Structure of Surfaces: Spectroscopy, Surface States

O 47 18:30 — 20:30 P1A
Electronic Structure of Surfaces: Magnetism and Spin Phenomena

O 48 18:30 — 20:30 P1A
Oxide and Insulator Surfaces: Structure, Epitaxy and Growth

O 49 18:30 — 20:30 P1A
Oxide and Insulator Surfaces: Adsorption

O 50 18:30 — 20:30 P1A
Semiconductor Substrates: Structure, Epitaxy, Growth and Adsorption

O 51 18:30 — 20:30 P1C
Nanostructures at Surfaces: 1D and 2D Structures and Networks

O 52 18:30 — 20:30 P1C
Nanostructures at Surfaces: Dots, Particles, Clusters

O 53 18:30 — 20:30 P1C
Nanostructures at Surfaces: Other Aspects

O 54 18:30 — 20:30 P1C
Metallic Nanowires on Semiconductor Surfaces

O 55 18:30 — 20:30 P2-EG
Graphene

O 56 18:30 — 20:30 P2-EG
2D Materials beyond Graphene

O 57 18:30 — 20:30 P2-EG
Ultrafast Electron and Spin Dynamics

O 58 18:30 — 20:30 P2-EG
Surface Science: Misc.

O 59 18:30 — 20:30 P2-OG1
Plasmonics and Nanooptics

O 60 18:30 — 20:30 P2-OG2
Solid-Liquid Interfaces: Structure, Spectroscopy, Reactions and Electrochemistry

O 61 18:30 — 20:30 P2-OG2
Heterogeneous Catalysis

O 62 18:30 — 20:30 P2-OG2
Surface Dynamics

O 63 18:30 — 20:30 P2-OG3
Focus Session: Charge Transport at Surfaces and Nanostructures with Multi-probe Techniques

O 64 18:30 — 20:30 P2-OG3
Scanning Probe Techniques: Method development

O 65 18:30 — 20:30 P2-OG4
Electronic Structure Theory: New Concepts and Developments in Density Functional Theory and Beyond

Physics of Socio-economic Systems Division (SOE)

Invited Talk

SOE 7.1 09:30 — 10:15 GÖR 226
Diffusion of Innovations under Direct and Indirect Peers Pressure
•*Ernesto Estrada*

Sessions

SOE 7 09:30 — 10:15 GÖR 226
Innovation Dynamics on Networks (Invited Talk Ernesto Estrada)

SOE 8 10:15 — 11:00 GÖR 226
Economic Models I

SOE 9 11:00 — 12:15 GÖR 226
Evolutionary Game Theory (joint session SOE / BP / DY)

SOE 10 14:00 — 14:45 GÖR 226
Traffic and Organization of Cities

SOE 11 14:45 — 15:30 GÖR 226
Physics of Collective Mobility (joint session SOE / DY / BP / jDPG, accompanying the symposium)

SOE 12 15:30 — 16:00 GÖR 226
Annual General Meeting of the Physics of Socio-economic Systems Division

Low Temperature Physics Division (TT)

Invited Talks

TT 21.1 09:30 — 10:00 HSZ 03
BCS-BEC Crossover, Preformed Pairs and Highly Spin-Polarized Superconducting Phase in FeSe
•Yuji Matsuda

TT 21.2 10:00 — 10:30 HSZ 03
Discovery of Orbital-Selective Cooper Pairing in FeSe
•J. C. Séamus Davis, Peter Sprau, Andrey Kostin, Andreas Kreisel, Anna Böhmer, Paul Canfield, S. Mukherjee, Peter Hirschfeld, Brian Andersen

TT 21.3 10:30 — 11:00 HSZ 03
Frustrated Magnetism and Electron-Electron Interactions in FeSe
•Roser Valenti

TT 21.4 11:15 — 11:45 HSZ 03
Orbital-Selective Pairing and Gap Structures of Iron-Based Superconductors
•Brian Andersen

TT 21.5 11:45 — 12:15 HSZ 03
New Experimental Results Concerning the Nematic State in Fe-based Superconductors
•Christoph Meingast

Sessions

TT 21 09:30 — 12:15 HSZ 03
Focus Session: Nematicity, Magnetism and Superconductivity in FeSe and Related Compounds

TT 22 09:30 — 13:15 HSZ 103
Transport: Quantum Coherence and Quantum Information Systems – Theory (jointly with MA, HL)

TT 23 09:30 — 11:45 HSZ 201
Transport: Topological Semimetals 1 (jointly with DS, MA, HL, O)

TT 24 09:30 — 13:00 HSZ 204
Low-Dimensional Systems: 1D – Theory

TT 25 09:30 — 13:00 HSZ 304
Correlated Electrons: Frustrated Magnets – Strong Spin-Orbit Coupling 1

TT 26 09:30 — 13:15 POT 51
Two-Dimensional Materials III (joint session DS, HL, TT, organised by HL)

TT 27 09:30 — 12:45 POT 151
Focus Session: Topological Insulators on Coupled Quantum Wells (joint session DS, HL, MA, O, TT, organised by HL)

TT 28 10:30 — 13:00 GER 38
Electronic-Structure Theory: New Concepts and Developments in Density Functional – Theory and Beyond – III (joint session DS, HL, MA, MM, O, TT, organised by O)

TT 29 12:00 — 13:00 HSZ 201
Other Low Temperature Topics: Cold Atomic Gases

TT 30 14:00 — 16:00 HSZ 03
Correlated Electrons: Quantum Impurities, Kondo Physics

TT 31 14:00 — 16:00 HSZ 103
Correlated Electrons: Other Materials

TT 32 14:00 — 15:15 HSZ 201
Transport: Nanomechanics and Optomechanics (jointly with CPP, DY, BP, DF)

TT 33 14:00 — 16:00 HSZ 204
Transport: Majorana Fermions

TT 34 14:00 — 15:45 HSZ 301
Spintronics, incl. Quantum Dynamics (joint session DS, HL, MA, TT, organised by MA)

TT 35 14:00 — 15:30 HSZ 304
Low-Dimensional Systems: 2D – Theory

TT 36 10:00 — 13:00 ZEU 147
Brownian Motion (jointly with DY)

TT 37 18:30 — 20:30 P2-EG
Graphene Posters (joint session DS, DY, HL, MA, O, TT, organised by O)

Working Group on Accelerator physics (AKBP)

Sessions

AKBP 2 09:30 — 12:45 MOL 213
New Accelerator Concepts II

AKBP 3 15:00 — 16:15 MOL 213
Particle Sources

Working Group on Equal Opportunities (AKC)

Session

AKC 1 14:00 — 16:00 HSZ 02
Fund your Research – Fördermöglichkeiten in der Wissenschaft

Working Group „Young DPG“ (AGjDPG)

Invited Talks

AGjDPG 2.1 14:00 — 14:30 HSZ 02
Vom Antrag zur Finanzierung – Fördermöglichkeiten der DFG
•Karin Zach

AGjDPG 2.2 14:30 — 15:00 HSZ 02
Die Fördermöglichkeiten des Bundes für Forschungsprojekte und den innovativen Mittelstand
•Alexandra Bender

AGjDPG 2.3 15:00 — 15:30 HSZ 02
Funding Opportunities Provided by the German Academic Exchange Service (DAAD)
•*Holger Finken*

AGjDPG 2.4 15:30 — 16:00 HSZ 02
Crafting a competitive grant application.
•*Tobias Klose*

Sessions

AGjDPG 1 09:30 — 15:00 HSZ 04
PhD Symposium: Quantum Magnets: Frustration and Topology in Experiment and Theory (jointly with MA)

AGjDPG 2 14:00 — 16:00 HSZ 02
Fund your Research – Fördermöglichkeiten in der Wissenschaft

Exhibition on Scientific Instruments and Literature

09:00 — 17:00 Foyer HSZ, Tents A/B

Job Market

12:00 — 13:00 HSZ 405
Basycon – „Hypothesen, Modelle, Experimente – Was Forschung und Unternehmensberatung gemeinsam haben“

13:15 — 14:15 HSZ 405
McKinsey –
„Karrieremöglichkeiten bei McKinsey“

EinsteinSlam

AGjDPG 3 20:00 — 22:00 HSZ 01

Wednesday, March 22, 2017

Plenary Talks

PV XIII 08:30 — 09:15 HSZ 01
Characterisation of Biological Photoreceptors in Space and Time
•Peter Hegemann

PV XVI 14:00 — 14:45 HSZ 01
Networks powered by quantum entanglement: from the first loophole-free Bell test to a quantum Internet
•Ronald Hanson

PV XVII 14:00 — 14:45 HSZ 02
The Statistical Mechanics of Active Matter
•Michael Cates

Prize Talks

PV XIV 13:15 — 13:45 HSZ 01
Functional domain walls in multiferroic oxides
•Dennis Meier
(Laureate of the Gustav-Hertz-Prize 2017)

PV XVIII 15:00 — 15:30 HSZ 04
Magnon transport in spin textures
•Helmut Schultheiß
(Laureate of the Walter-Schottky-Prize 2017)

Lunch Talk

PV XV 13:15 — 13:45 HSZ 02
Physics Crossing Boundaries: From Nanoscience to Bio and IT Spin-Off Companies and a New Open-Access Journal
•Richard Palmer

Symposium Physics of Collective Mobility (SYCM)

Invited Talks

SYCM 1.1 09:30 — 10:00 HSZ 02
Mobility in shareability networks
•Michael Szell

SYCM 1.2 10:00 — 10:30 HSZ 02
Trail-following bacteria: from single particle dynamics to collective behaviour
Anatolij Gelimson, Kun Zhao, Calvin K. Lee, W. Till Kranz, Gerard C. L. Wong, •Ramin Golestanian

SYCM 1.3 10:30 — 11:00 HSZ 02
Mobility and Self-Organization in Multi-Layer Networks: A Meta-Foodweb example
•Thilo Gross, Andreas Brechtel, Philipp Gramlich, Daniel Ritterskamp, Barbara Drossel

SYCM 1.4 11:15 — 11:45 HSZ 02
Temporal Percolation in Critical Collective Mobility Systems
•Andreas Sorge, Debsankha Manik, Jan Nagler, Marc Timme

SYCM 1.5 11:45 — 12:15 HSZ 02
Modeling the evolution of cities
•Marc Barthelemy

Session

SYCM 1 09:30 — 12:15 HSZ 02
Physics of Collective Mobility (Symposium SYCM, joint SOE / DY / BP / jDPG)

Symposium Interfacial Challenges in Solid-State Li Ion Batteries (SYLI)

Sessions

SYLI 6 10:15 — 11:30 IFW A
Defects, structure and thermodynamics

SYLI 7 11:45 — 12:45 IFW A
Hybrid and structured electrolytes

SYLI 8 15:45 — 16:45 IFW D
Structure – property relationships II

Symposium Nanostructuring Beyond Conventional Lithography (SYNS)

Invited Talks

SYNS 1.1 15:00 — 15:30 HSZ 02
The Limits to Lithography: How Electron-Beams Interact with Materials at the Smallest Length Scales
•*Karl K. Berggren*

SYNS 1.2 15:30 — 16:00 HSZ 02
High precision fabrication for light management at nanoscale
•*Saulius Juodkazis, Armandas Balcytis*

SYNS 1.3 16:00 — 16:30 HSZ 02
Directed self-assembly of performance materials
•*Paul Nealey*

SYNS 1.4 16:45 — 17:15 HSZ 02
Nanometer accurate topography patterning using thermal Scanning Probe Lithography
•*Armin W. Knoll*

SYNS 1.5 17:15 — 17:45 HSZ 02
High resolution 3D nanoimprint lithography
•*Hartmut Hillmer*

Session

SYNS 1 15:00 — 17:45 HSZ 02
Symposium Nanostructuring Beyond Conventional Lithography \\ (MI with DS, DF, HL, MM and VA)

Biological Physics Division (BP)

Invited Talks

BP 38.1 09:30 — 10:00 HÜL 386
Simulations move toward the understanding of protein-mediated membrane fusion
•*Herre Jelger Risselada*

BP 39.5 11:15 — 11:45 SCH A251
Navigating the cytoskeleton: new tools to dissect and direct intracellular transport
•*Lukas Kapitein*

BP 42.1 15:00 — 15:30 ZEU 250
Linking AMPA receptor nanoscale organization and function at excitatory synapses
•*Daniel Choquet*

BP 43.1 15:00 — 15:30 HÜL 386
Diffusive anchorage of molecular motors allows for adaptive force generation
•*Stefan Diez*

Sessions

BP 36 08:30 — 09:15 HSZ 01
Plenary Talk

BP 37 09:30 — 12:15 HSZ 02
Physics of Collective Mobility (Joint Symposium SOE/DY/BP/jDPG)

BP 38 09:30 — 13:00 HÜL 386
Membranes and Vesicles I

BP 39 09:30 — 12:30 SCH A251
Optogenetics for the Cytoskeleton – Focus Session organised by Ulrich Schwarz

BP 40 10:15 — 13:00 ZEU 260
Colloids and Complex Fluids II (Joint Session CPP/BP/DY)

BP 41 15:00 — 19:00 HÜL 186
Active Matter I (Joint Session DY/BP/CPP)

BP 42 15:00 — 17:30 ZEU 250
Neurosciences

BP 43 15:00 — 17:15 HÜL 386
Cytoskeletal Filaments

BP 44 15:00 — 17:15 SCH A251
Biomaterials and Biopolymers (Joint Session BP/CPP)

BP 45 18:30 — 19:30 HÜL 386
Annual General Meeting of the Biological Physics Division

Chemical and Polymer Physics Division (CPP)

Invited Talks

CPP 31.1 09:30 — 10:00 ZEU 222
Using classical polymer science tools to manipulate phase transformations, solid-state order and properties of semiconducting plastics – and beyond
•Natalie Stingelin

CPP 35.6 11:45 — 12:15 ZEU 222
Density functional theory of crystallization: from anisotropic particles to polymers
•Hartmut Loewen

CPP 36.1 10:15 — 10:45 ZEU 260
Computer simulations of colloidal systems under flow
•Arash Nikoubashman

CPP 37.5 11:15 — 11:45 ZEU 255
Nonlinear dielectric spectroscopy in supercooled liquids
Peter Lunkenheimer, Marion Michl, Thomas Bauer, Francois Ladieu, Samuel Albert, •Alois Loidl

CPP 38.1 10:15 — 10:45 ZEU 250
Light-induced degradation of methylammonium and formamidinium PbI3 perovskites
•Norbert H. Nickel, Felix Lang, Victor V. Brus, Jörg Rappich

CPP 40.1 15:00 — 15:30 ZEU 222
Architectural Engineering of Semi-Crystalline Elastomers
•Sergei Sheiko

CPP 40.5 16:30 — 17:00 ZEU 222
Chain Trajectory of Semicrystalline Polymers as Revealed by Solid-State NMR Spectroscopy
•Toshikazu Miyoshi

CPP 40.9 17:45 — 18:15 ZEU 222
The Role of Entanglement in Polymer Crystallization
•Chuanfu Luo

CPP 41.1 15:00 — 15:30 ZEU 260
The role of incoherent hopping in the photogeneration of charges in organic semiconductors
•*Anna Köhler*

CPP 42.5 16:00 — 16:30 ZEU 114
Aqueous Ionic Liquids and Their Influence on Peptide Conformations: Denaturation and Dehydration Mechanisms
•*Jens Smiatek*

CPP 47.1 16:15 — 16:45 ZEU 255
Hard science with soft spheres: learning from foams and emulsions
•*Wiebke Drenckhan-Andreatta*

Sessions

CPP 30 09:30 — 12:45 HSZ 201
Transport: Molecular Electronics and Photonics (jointly with CPP, HL, MA, O)

CPP 31 09:30 — 10:00 ZEU 222
Keynote Lecture II

CPP 32 09:30 — 13:15 CHE 91
Organic Thin Films I (joint session CPP/DS/HL, organised by DS)

CPP 33 09:30 — 12:45 POT 81
Organic Photovoltaics and Electronics I (joint session CPP/DS/HL, organised by HL)

CPP 34 09:30 — 12:30 GER 37
Focus: Spatio-Temporal Multiscale Optical Spectroscopy Meets Functional Materials (joint session DF/CPP/O, organised by DF)

CPP 35 10:15 — 13:00 ZEU 222
Focus: Polymer Crystallization – from Model Systems to New Materials I

CPP 36 10:15 — 13:00 ZEU 260
Colloids and Complex Fluids II (joint session BP/CPP/DY, organised by CPP)

CPP 37 10:15 — 13:00 ZEU 255
Fluids and Glasses I

CPP 38 10:15 — 12:45 ZEU 250
Fundamentals of Perovskite Photovoltaics V (joint session CPP/DS/HL)

CPP 39 14:45 — 17:45 POT 81
Organic Photovoltaics and Electronics II (joint session CPP/DS/HL, organised by HL)

CPP 40 15:00 — 18:15 ZEU 222
Focus: Polymer Crystallization – from Model Systems to New Materials II

CPP 41 15:00 — 18:30 ZEU 260
Organic Electronics and Photovoltaics IV: OPV (joint session CPP/DS/HL, organised by CPP)

CPP 42 15:00 — 18:00 ZEU 114
Charged Soft Matter, Ionic Liquids and Polyions I

CPP 43 15:00 — 16:00 ZEU 255
Fluids and Glasses II

CPP 44 15:00 — 19:00 HÜL 186
Aktive Matter I (joint session DY/BP/CPP, organised by DY)

CPP 45 15:00 — 17:15 SCH A251
Biomaterials and Biopolymers (joint session BP/CPP, organised by BP)

CPP 46 15:00 — 17:00 CHE 91
Organic Thin Films II (joint session CPP/DS/HL, organised by DS)

CPP 47 16:15 — 18:15 ZEU 255
Fluids and Interfaces I

CPP 48 18:30 — 21:00 P2-OG1
Poster: Polymer Crystallization, Nucleation and Selfassembly

CPP 49 18:30 — 21:00 P2-OG1
Poster: Surfaces, Interfaces, Thin Films, Nanostructures

CPP 50 18:30 — 21:00 P3
Poster: Organic Electronics and Photovoltaics, Molecular Excitations

CPP 51 18:30 — 21:00 P3
Poster: Charged Soft Matter, Polyelectrolytes, Ionic Liquids

CPP 52 18:30 — 21:00 P3
Poster: Hydogels, Microgels, Responsive Polymers

Physics Education Division (DD)

Invited Talk

DD 26.1 13:00 — 14:00 GER 38
Gutes Atom – böses Atom: Radioaktivität und der geheime Lehrplan in Schulbüchern
•*Susanne Heinicke*

Sessions

DD 17 09:30 — 10:50 GER 39
Lehr- und Lernforschung 3

DD 18 09:30 — 10:50 GER 52
Neue Konzepte 3

DD 19 09:30 — 10:50 GER 54
Lehreraus- und Lehrerfortbildung 3

DD 20 09:30 — 10:50 GER 009
Sonstige 1

DD 21 09:30 — 10:50 GER 007
Experimente

DD 22 11:10 — 12:10 GER 39
Praktika, neue Praktikumsversuche

DD 23 11:10 — 12:10 GER 52
Hochschuldidaktik 3

DD 24 11:10 — 12:10 GER 54
Physikdidaktik und Inklusion

DD 25 11:10 — 12:10 GER 009
Sonstige 2

DD 26 13:00 — 14:00 GER 38
Hauptvortrag 3

Dielectric Solids Division (DF)

Topical Talks

DF 10.1 09:30 — 10:00 GER 37
Mobile electronic excitations studied by ultrafast spectroscopy
•Stefan Lochbrunner, Franziska Fennel, Steffen Wolter, Tim Völzer

DF 10.3 10:20 — 10:50 GER 37
Time-resolved Characterisation of photoactive materials using terahertz spectroscopy
•Rainer Eichberger

DF 10.4 11:10 — 11:40 GER 37
Theoretical simulations of pump-probe spectroscopies in solids
•Michael Sentef

DF 10.6 12:00 — 12:30 GER 37
Accessing micro- and mesoscopic ultrafast electron dynamics in low-dimensional materials
Michele Puppin, Christopher Nicholson, Melanie Müller, Roman Bertoni, Hannes Hübener, Angel Rubio, Claude Monney, Cephise Cacho, Martin Wolf, Alexander Paarmann, Laurenz Rettig, •Ralph Ernstorfer

DF 11.1 09:30 — 10:00 WIL B321
Implications of domain evolution during the growth of ferroelectric superlattices
Rui Liu, Benjamin Bein, Hsiang-Chun Hsing, Anna Gura, Mohammed Humed Yusuf, Giulia Bertino, Jin-Wen Lai, •Matthew Dawber

DF 11.9 12:15 — 12:45 WIL B321
The electro-caloric effect in $BaTiO_3$ from first principles
•Claude Ederer

DF 15.1 15:00 — 15:30 WIL B321
Domain and fluctuation dynamics in magnetoelectric multiferroics
•Joachim Hemberger

Sessions

DF 10 09:30 — 12:30 GER 37
Focus: Spatio-Temporal Multiscale Optical Spectroscopy Meets Functional Materials (DF with O, CPP)

DF 11 09:30 — 13:00 WIL B321
Ferroics – Domains, Domain Walls and Skyrmions II

DF 12 13:15 — 13:45 HSZ 01
PV XV – Dennis Meier
(Laureate of the Gustav-Hertz-Prize 2017)

DF 13 15:00 — 17:45 HSZ 02
SYNS – Symposium Nanostructuring Beyond Conventional Lithography (MI with DS, DF, HL, MM and VA)

DF 14 15:00 — 18:00 GER 37
Various Topics II

DF 15 15:00 — 17:30 WIL B321
Ferroics – Domains, Domain Walls and Skyrmions III

18:00 — 19:00 GER 37
Annual General Meeting
of the Dielectric Solids Divsion

DF 16 18:00 — 20:00 P4
Crystallography – Poster Session (KR with DF)

Thin Films Division (DS)

Topical Talks

DS 28.1 09:30 — 10:00 CHE 89
Self-consistent hybrid functional calculations: Electronic and optical properties of oxide semiconductors
•Daniel Fritsch, Benjamin Morgan, Aron Walsh

DS 28.6 11:15 — 11:45 CHE 89
Exceptional Points in Oxide Bulk and Metamaterials
•Marius Grundmann

DS 28.8 12:00 — 12:30 CHE 89
Kinetics and thermodynamcis of binary and ternary oxides during molecular beam epitaxy
•*Patrick Vogt, Oliver Bierwagen*

DS 32.1 14:45 — 15:15 CHE 89
Defect induced magnetic or optical properties in gallium-based oxides
•*Laurent Binet, Didier Gourier*

DS 32.3 15:30 — 16:00 CHE 89
Vacancy defects and electrical compensation in gallium oxide
•*Filip Tuomisto*

DS 32.5 16:30 — 17:00 CHE 89
Integration of Oxide Semiconductors with Traditional Semiconductors – A New Twist
•*Scott Chambers*

Sessions

DS 28 09:30 — 13:00 CHE 89
Focussed Session: Oxide Semiconductors for Novel Devices I

DS 29 09:30 — 13:15 CHE 91
Organic Thin Films I

DS 30 09:30 — 13:15 POT 51
Two-dimensional materials IV (jointly with HL/TT)

DS 31 10:30 — 13:00 WIL A317
2D Materials Beyond Graphene III (jointly with O)

DS 32 14:45 — 17:45 CHE 89
Focussed Session: Oxide Semiconductors for Novel Devices II

DS 33 15:00 — 17:45 HSZ 204
Transport: Topological Semimetals 2 (jointly with MA/TT)

DS 34 15:00 — 17:00 CHE 91
Organic Thin Films II

DS 35 15:00 — 17:45 WIL A317
2D Materials Beyond Graphene IV (jointly with O)

DS 36 17:00 — 19:00 P2-EG
Postersession I

19:00 — 20:00 CHE 89
Annual General Meeting
of the Thin Films Division

Dynamics and Statistical Physics Division (DY)

Invited Talks

DY 30.1 09:30 — 10:00 HÜL 186
Fast quantum processes without excitations: shortcuts to adiabaticity
•*Sebastian Deffner*

DY 31.1 09:30 — 10:00 ZEU 118
Magnetocapillary interactions for self-assembling dynamical systems
•*Nicolas Vandewalle, Galien Grosjean, Maxime Hubert*

DY 31.2 10:00 — 10:30 ZEU 118
Influences of fluxes in nonequilibrium soft matter
•*Marco G. Mazza*

DY 32.6 11:30 — 12:00 HÜL 186
Semiclassical Classification of Periodic Orbits in Quantum Many-Body Systems
•*Daniel Waltner, Maram Akila, Boris Gutkin, Petr Braun, Thomas Guhr*

DY 38.1 15:00 — 15:30 ZEU 160
Asymmetry-Induced Synchronization Stability in Power-Grid Networks
•*Adilson Motter*

DY 38.7 17:00 — 17:30 ZEU 160
Nonlinear Rerouting and Response in Electric Power Networks
•*Marc Timme, Dirk Witthaut, Xiaozhu Zhang*

DY 39.1 15:00 — 15:30 ZEU 118
Granular Materials: From solid to fluid with a variable jamming density
•*Stefan Luding*

Sessions

DY 29	09:30 — 12:15	HSZ 02
	Physics of Collective Mobility (Symposium SYCM, joint SOE / DY / BP / jDPG)	
DY 30	09:30 — 10:00	HÜL 186
	Invited talk	
DY 31	09:30 — 13:00	ZEU 118
	Particulate Matter I: From microscopic interactions to collective motion (Focus session)	
DY 32	10:00 — 13:00	HÜL 186
	Quantum Chaos	
DY 33	10:00 — 13:15	ZEU 160
	Fluid Dynamics and Turbulence	
DY 34	10:15 — 13:00	ZEU 260
	Colloids and Complex Fluids II (joint session BP/CPP/DY, organised by CPP)	
DY 35	14:00 — 14:45	HSZ 02
	Plenary Talk M. Cates	
DY 36	15:00 — 17:45	HSZ 03
	Collective Quantum Dynamics: From Fundamentals to New Phenomena (Focus session joint DY/TT)	
DY 37	15:00 — 19:00	HÜL 186
	Aktive Matter I (joint session DY/BP/CPP)	
DY 38	15:00 — 19:15	ZEU 160
	The Physics of Power-Grids – Fluctuations, Synchronization and Network Structures (Focus session, joint DY/SOE)	
DY 39	15:00 — 16:15	ZEU 118
	Particulate Matter II: From microscopic interactions to collective motion (Focus session)	
DY 40	16:30 — 17:30	ZEU 118
	Granular Matter	

History of Physics Division (GP)

Invited Talk

GP 7.1 09:30 — 10:15 HSZ 105
Chancen und Risiken eines transnationalen Lebens: Der Metallforscher Jan Czochralski im 20. Jahrhundert
•Katrin Steffen

Sessions

GP 7 09:30 — 10:45 HSZ 105
Biographien

GP 8 10:45 — 13:00 HSZ 105
Freie Sektion III

Semiconductor Physics Division (HL)

Invited Talks

HL 50.1 09:30 — 10:00 POT 251
Photoactivated chemical processes on group III-nitride nanostructures and nanohybrids
Paula Neuderth, Sara Hölzl, Pascal Hille, Jörg Schörmann, Christian Reitz, Mariona Coll, Jordi Arbiol, Roland Marschall, •Martin Eickhoff

HL 51.1 09:30 — 10:00 POT 112
Coupling atomic and solid state quantum systems
•Val Zwiller

HL 51.5 10:45 — 11:15 POT 112
Strain-tunable quantum dots interfaced with atomic vapors
•Rinaldo Trotta

HL 51.6 11:45 — 12:15 POT 112
Atomic-vapor-enabled variable optical delay for triggered single-photons from a semiconductor quantum dot
•Hüseyin Vural, Jonas Weber, Markus Müller, Simon Kern, Julian Maisch, Matthias Widmann, Robert Löw, Jörg Wrachtrup, Ilja Gerhardt, Simone Portalupi, Michael Jetter, Peter Michler

HL 51.8 12:30 — 13:00 POT 112
Correlating independent spins via single-photon projections
•*Mete Atature*

HL 58.1 14:45 — 15:15 POT 151
Towards an ideal semiconductor source of polarization entangled photons
•*Fei Ding*

Sessions

HL 45 09:30 — 13:00 HSZ 03
Transport: Quantum Coherence and Quantum Information Systems – Experiment (jointly with MA, HL)

HL 46 09:30 — 12:45 HSZ 201
Transport: Molecular Electronics and Photonics (jointly with CPP, HL, MA, O)

HL 47 09:30 — 12:45 POT 81
Organic Photovoltaics and Electronics I (joined session with CPP)

HL 48 09:30 — 13:15 POT 51
Two-dimensional materials IV (joined session with TT)

HL 49 09:30 — 12:45 POT 151
Quantum Dots: Optical Properties III

HL 50 09:30 — 13:00 POT 251
Nitrides: Preparation and Characterisation

HL 51 09:30 — 13:00 POT 112
Focus Session: Hybrid Quantum-Dot / Atom Systems

HL 52 09:30 — 11:30 POT 06
Devices

HL 53 10:15 — 12:45 ZEU 250
Fundamentals of Perovskite Photovoltaics V (joint session CPP/DS/HL)

HL 54 10:30 — 12:30 TRE Ma
Plasmonics and Nanooptics VI: Light-Matter Interactions and Characterisation

HL 55 10:30 — 13:00 GER 38
Electronic-Structure Theory: New Concepts and Developments in Density Functional Theory and Beyond – IV

HL 56 10:30 — 13:00 GER 38
Electronic-Structure Theory: New Concepts and Developments in Density Functional Theory and Beyond – IV

HL 57 14:45 — 17:45 POT 81
Organic Photovoltaics and Electronics II (joined session with CPP)

HL 58 14:45 — 18:15 POT 151
Quantum Dots: Optical Properties IV

HL 59 14:45 — 17:45 POT 251
Nitrides: Preparation and Characterisation II

HL 60 15:00 — 18:30 ZEU 260
Organic Electronics and Photovoltaics IV: OPV

HL 61 15:00 — 18:00 TRE Ma
Plasmonics and Nanooptics VII: Applications and Other Aspects

HL 62 15:00 — 18:15 GER 38
Electronic-Structure Theory: New Concepts and Developments in Density Functional Theory and Beyond – V

HL 63 15:00 — 19:00 P1A
Poster: Quantum Dots and Optics

HL 64 15:00 — 19:00 P1C
Poster: Photovoltaics and Optics

Crystallography Division (KR)

Sessions

KR 2 09:30 — 11:30 MER 02
X-Ray Imaging, Holography, Ptychography and Tomography (with MI)

KR 3 18:00 — 20:00 P4
Crystallography – poster session

Magnetism Division (MA)

Invited Talks

MA 32.1 09:30 — 10:00 HSZ 01
Collective modes in magnonic vortex crystals
•Guido Meier

MA 32.2 10:00 — 10:30 HSZ 01
Stability of interfacial Skyrmions, Solitons and Bound Monopoles: How to store Energy in topological magnetic Quasiparticles.
•Elena Vedmedenko

MA 32.3 10:30 — 11:00 HSZ 01
Exploring the statistical physics of frustrated spin systems with artificial spin ice
•Ian Gilbert, Yuyang Lao, Sheng Zhang, Gia-Wei Chern, Robert Ilic, Daniel Pierce, Cristiano Nisoli, John Unguris, Peter Schiffer

MA 32.4 11:15 — 11:45 HSZ 01
Skyrmions in [Pt/Co/Ir] multilayers at room temperature
•Katharina Zeissler, Simone Finizio, Jörg Raabe, Michal Mruczkiewicz, Philippa Shepley, Thomas Moore, Gavin Burnell, Christopher Marrows

MA 32.5 11:45 — 12:15 HSZ 01
Artificial magnets as model systems: from the fragmentation of magnetization to the seminal square ice model
•Benjamin Canals, Yann Perrin, Ioan Chioar, Nicolas Rougemaille

MA 45.1 15:45 — 16:15 HSZ 04
Manipulating Room Temperature Magnetic Skyrmions
•Axel Hoffmann

MA 45.2 16:15 — 16:45 HSZ 04
Spin wave caustics and channelling in chiral spin systems
•Joo-Von Kim

MA 45.3 17:00 — 17:30 HSZ 04
Snell's Law for Spin Waves
•*Johannes Stigloher, Martin Decker, Helmut Koerner, Kenji Tanabe, Takahiro Moriyama, Takuya Taniguchi, Hiroshi Hata, Marco Madami, Gianluca Gubbiotti, Kensuke Kobayashi, Teruo Ono, Christian Back*

Sessions

MA 32 09:30 — 12:15 HSZ 01
Focus Session: Magnetic Correlations in Mesoscopic Spin Structures

MA 33 09:30 — 13:00 HSZ 03
Transport: Quantum Coherence and Quantum Information Systems – Experiment (jointly with MA, HL)

MA 34 09:30 — 13:00 HSZ 04
Spin Dynamics and Transport: Magnonics

MA 35 09:30 — 12:45 HSZ 101
Magnetic Particles / Clusters

MA 36 09:30 — 12:45 HSZ 201
Transport: Molecular Electronics and Photonics (jointly with CPP, HL, MA, O)

MA 37 09:30 — 12:30 HSZ 401
Micro- and Nanostructured Magnetic Materials

MA 38 09:30 — 12:15 HSZ 403
Electron Theory of Magnetism and Correlations

MA 39 09:30 — 11:30 MER 02
X-Ray Imaging, Holography, Ptychography and Tomography

MA 40 15:00 — 15:30 HSZ 04
Walter-Schottky-Prize Talk (PV IX)

MA 41 15:00 — 18:00 HSZ 101
Micromagnetism / Computational Magnetics

MA 42 15:00 — 17:45 HSZ 204
Transport: Topological Semimetals 2 (jointly with DS, MA, HL, O)

MA 43 15:00 — 18:00 HSZ 401
Topological Insulators I (jointly with DS, HL, O, TT)

MA 44 15:00 — 17:30 HSZ 403
PhD Symposium Quantum Magnets (contributed talks)

MA 45 15:45 — 18:00 HSZ 04
Focus Session: Magnon Transport in Metallic Spin Textures

Microprobes Division (MI)

Invited Talks

MI 4.1 09:30 — 10:00 MER 02
X-ray Microscopy: Imaging the Chemistry Inside
•Christian G. Schroer

MI 5.3 12:00 — 12:30 MER 02
NanoFrazor Lithography – Revolutionizing nanofabrication
•Zhengming Wu, Colin Rawlings, Simon Bonanni, Tero Kulmala, Heiko Wolf, Urs Duerig, Armin W. Knoll, Martin Spieser, Philip Paul, Felix Holzner

Sessions

MI 4 09:30 — 11:30 MER 02
X-Ray Imaging, Holography, Ptychography and Tomography

MI 5 11:30 — 13:15 MER 02
Session on Nanostructuring Beyond Conventional Lithography

MI 6 15:00 — 17:45 HSZ 02
Symposium Nanostructuring Beyond Conventional Lithography (MI with DS, DF, HL, MM and VA)

MI 7 18:00 — 20:00 P4
Poster: Microanalysis and Microscopy

Metal and Material Physics Division (MM)

Invited Talks, Topical Talks

MM 36.1 09:30 — 10:00 BAR 205
Theory Driven Data Driven Design for Structural Metals
•William A. Curtin

MM 37.1 10:15 — 10:45 BAR 205
Data-driven theory-guided materials design containing scale-bridging concepts
•Martin Friák, Stefanie Sandlöbes, Zongrui Pei, David Holec, Mojmír Šob, Jörg Neugebauer, Dierk Raabe

MM 42.1 12:00 — 12:30 BAR 205
Generating and assessing data from combinatorial and high-throughput experiments for the design of new materials
•Alfred Ludwig

MM 44.1 11:30 — 12:00 IFW B
Manipulating interfaces in nanoporous metals: Towards robust nanostructured materials with novel functionalities
•Nadiia Mameka

MM 45.1 15:00 — 15:30 BAR 205
Diffusion in liquid metals and alloys
•Florian Kargl

MM 47.1 15:45 — 16:15 BAR 205
Finite-temperature simulations of materials properties for data-driven materials design
•Igor Abrikosov

MM 48.1 15:45 — 16:15 IFW A
Plastic deformation in amorphous solids: The role of elasticity and spatio-temporal correlations of fluctuations
•Fathollah Varnik, Muhammad Hassani

MM 53.1 18:30 — 19:00 BAR 205
Small scale deformation behavior of high performance materials – Advanced mechanical testing meets high end microstructure Characterisation

•Verena Maier-Kiener, Irmgard Weißensteiner, Benjamin Schuh, Anton Hohenwarter, Helmut Clemens

Sessions

MM 36 09:30 — 10:00 BAR 205
Invited talk Curtin

MM 37 10:15 — 11:45 BAR 205
Topical session: Data driven materials design – defect engineering

MM 38 10:15 — 11:30 IFW A
SYLI: Symposium Interfacial Challenges in Solid-State Li Ion Batteries – defects, structure and thermodynamics

MM 39 10:15 — 11:15 IFW B
Topical session: Interface-Controlled Microstructures: Mechanical Properties and Mechano-Chemical Coupling – Structure and deformation III

MM 40 10:15 — 11:15 IFW D
Transport III – thermal transport

MM 41 10:30 — 13:00 GER 38
Electronic Structure Theory: New Concepts and Developments in Density Functional Theory and Beyond – IV

MM 42 12:00 — 13:15 BAR 205
Topical session: Data driven materials design – high through-put

MM 43 11:45 — 12:45 IFW A
SYLI: Symposium Interfacial Challenges in Solid-State Li Ion Batteries – hybrid and structured electrolytes

MM 44 11:30 — 13:15 IFW B
Topical session: Interface-Controlled Microstructures: Mechanical Properties and Mechano-Chemical Coupling – Nano-porous materials

MM 45 15:00 — 15:30 BAR 205
Invited talk Kargl

MM 46 15:00 — 18:15 GER 38
Electronic Structure Theory: New Concepts and Developments in Density Functional Theory and Beyond – V

MM 47 15:45 — 17:00 BAR 205
Topical session: Data driven materials design – ab initio materials design

MM 48 15:45 — 17:15 IFW A
Topical session: Dynamics, relaxation and deformation in deeply supercooled metallic liquids and glasses III – plasticity and hetererogeneities

MM 49 15:45 — 16:45 IFW B
Microstructure and Phase Transformations – shape memory alloys

MM 50 15:45 — 16:45 IFW D
SYLI: Symposium Interfacial Challenges in Solid-State Li Ion Batteries – Structure – property relationships II

MM 51 17:15 — 18:00 BAR 205
Topical session: Data driven materials design – databases

MM 52 17:00 — 18:00 IFW B
Microstructure and Phase Transformations – phase stability

MM 53 18:30 — 19:00 BAR 205
Invited talk Maier-Kiener

19:30 — 20:30 BAR 205
Annual General Meeting
of the Metal and Material Physics Division

Surface Science Division (O)

Invited Talks

O 66.1 09:30 — 10:15 TRE Phy
Probing catalytic surface reactions in real time
•*Anders Nilsson*

O 68.1 10:30 — 11:00 TRE Phy
Electronic orders in light-driven materials
•Philipp Werner, Yuta Murakami, Hugo Strand, Shintaro Hoshino, Martin Eckstein

O 68.2 11:00 — 11:30 TRE Phy
Pump/probe photoemission spectroscopy in charge density wave insulators
•James Freericks

O 68.3 11:30 — 12:00 TRE Phy
Controlling magnetism and pairing in a periodically driven Hubbard model
•Stephen Clark, Jonathan Coulthard, Juan Jose Mendoza-Arenas, Martin Eckstein, Dieter Jaksch, Andrea Cavalleri

O 68.4 12:00 — 12:30 TRE Phy
Ultrafast Terahertz and XUV ARPES Probes of Quantum Materials Dynamics
•Robert A. Kaindl

O 68.5 12:30 — 13:00 TRE Phy
Ultrafast spin interactions revealed with terahertz radiation
•Tobias Kampfrath

O 71.1 10:30 — 11:00 GER 38
Electronic excitations in 2D materials and heterostructures
•Kristian Sommer Thygesen

O 77.1 15:00 — 15:30 WIL A317
Carbon Nanomembranes (CNM): 2D Materials Beyond Graphene
•Armin Gölzhäuser

O 79.1 15:00 — 15:30 WIL C307
Sensing the Quantum Limit in Scanning Tunneling Spectroscopy: From the Josephson Effect to Quantum Tunneling
•Christian R. Ast

Sessions

O 66 09:30 — 10:15 TRE Phy
Overview Talk: Anders Nilsson

O 67 10:15 — 11:30 IFW A
SYLI: Symposium Interfacial Challenges in Solid-State Li Ion Batteries – defects, structure and thermodynamics

O 68 10:30 — 13:00 TRE Phy
Focus Session: Non-equilibrium Dynamics in Light-driven Materials: Theory Meets Experiment

O 69 10:30 — 12:30 TRE Ma
Plasmonics and Nanooptics VI: Light-Matter Interactions and Characterisation

O 70 10:30 — 13:00 WIL A317
2D Materials Beyond Graphene III

O 71 10:30 — 13:00 GER 38
Electronic Structure Theory: New Concepts and Developments in Density Functional Theory and Beyond – IV

O 72 10:30 — 12:45 WIL C107
Oxide and Insulator Surfaces: Adsorption I

O 73 10:30 — 13:00 REC/PHY C213
Nanostructures at Surfaces: Metals, Oxides and Semiconductors III

O 74 11:45 — 12:45 IFW A
SYLI: Symposium Interfacial Challenges in Solid-State Li Ion Batteries – hybrid and structured electrolytes

O 75 15:00 — 18:45 TRE Phy
Ultrafast Electron and Spin Dynamics

O 76 15:00 — 18:00 TRE Ma
Plasmonics and Nanooptics VII: Applications and Other Aspects

O 77 15:00 — 17:45 WIL A317
2D Materials Beyond Graphene IV

O 78 15:00 — 18:15 GER 38
Electronic Structure Theory: New Concepts and Developments in Density Functional Theory and Beyond – V

O 79 15:00 — 18:15 WIL C307
Electronic Structure of Surfaces: Spectroscopy, Surface States I

O 80 15:45 — 16:45 IFW D
SYLI: Symposium Interfacial Challenges in Solid-State Li Ion Batteries – Structure – property relationships II

O 81 16:00 — 18:30 WIL C107
Oxide and Insulator Surfaces: Adsorption II

O 82 16:00 — 18:30 REC/PHY C213
Nanostructures at Surfaces: Graphene and Other Aspects

Physics of Socio-economic Systems Division (SOE)

Sessions

SOE 13 09:30 — 12:15 HSZ 02
Symposium SYCM: Physics of Collective Mobility (SOE / DY / BP / jDPG)

SOE 14 15:00 — 19:15 ZEU 160
Focus: The Physics of Power-Grids – Fluctuations, Synchronization and Network Structures (joint session DY / SOE)

SOE 15 15:00 — 18:15 GÖR 226
Focus Session: Cities as complex systems

Low Temperature Physics Division (TT)

Invited Talks

TT 46.1 15:00 — 15:30 HSZ 03
Many-Body Localization and Glassiness in Quantum Spin Systems
•*Antonello Scardicchio*

TT 46.2 15:30 — 16:00 HSZ 03
Exploring Many-Body Localization in Two Dimensions
•*Christian Gross*

TT 46.3 16:00 — 16:30 HSZ 03
Floquet Engineering and Control of Topology in Solid State Systems
•Takashi Oka, Leda Bucciantini, Sthitadhi Roy, Sota Kitamura

TT 46.4 16:45 — 17:15 HSZ 03
Hydrodynamic Regimes of Electron Transport
•Andrew Mackenzie

TT 46.5 17:15 — 17:45 HSZ 03
Dynamical Phase Transitions
•Stefan Kehrein

TT 47.1 15:00 — 15:30 HSZ 103
Interplay between CDW and Superconductivity: Effect of Pressure
•Matthieu Le Tacon

Sessions

TT 38 09:30 — 13:00 HSZ 03
Transport: Quantum Coherence and Quantum Information Systems – Experiment (jointly with MA, HL)

TT 39 09:30 — 13:15 HSZ 103
Superconductivity: (General) Theory

TT 40 09:30 — 12:45 HSZ 201
Transport: Molecular Electronics and Photonics (jointly with CPP, HL, MA, O)

TT 41 09:30 — 13:00 HSZ 204
Correlated Electrons: Quantum-Critical Phenomena

TT 42 09:30 — 13:00 HSZ 304
Correlated Electrons: Frustrated Magnets – Strong Spin-Orbit Coupling 2

TT 43 09:30 — 13:15 POT 51
Two-Dimensional Materials IV (joint session DS, HL, TT, organised by HL)

TT 44 10:30 — 13:00 TRE Phy
Focus Session: Non-Equilibrium Dynamics in Light-Driven Materials: Theory Meets Experiment (joint session O, TT, organised by O)

TT 45 10:30 — 13:00 GER 38
Electronic-Structure Theory: New Concepts and Developments in Density Functional Theory and Beyond – IV (joint session DS, HL, MA, MM, O, TT, organised by O)

TT 46 15:00 — 17:45 HSZ 03
Focus Session: Collective Quantum Dynamics: From Fundamentals to New Phenomena

TT 47 15:00 — 18:00 HSZ 103
Superconductivity: Properties and Electronic Structure 2

TT 48 15:00 — 17:45 HSZ 201
Superconductivity: Tunnelling, Josephson Junctions, SQUIDs 2

TT 49 15:00 — 17:45 HSZ 204
Transport: Topological Semimetals 2 (jointly with DS, MA, HL, O)

TT 50 15:00 — 18:00 HSZ 304
Correlated Electrons: Frustrated Magnets – Low-Dimensional Systems

TT 51 15:00 — 18:00 HSZ 401
Topological Insulators (joint session DS, HL, MA, O, TT, organised by MA)

TT 52 15:00 — 18:15 GER 38
Electronic-Structure Theory: New Concepts and Developments in Density Functional Theory and Beyond – V (joint session DS, HL, MA, MM, O, TT, organised by O)

TT 53 15:00 — 19:00 P2-OG2
Poster Session: Superconductivity 1

TT 54 15:00 — 19:00 P2-OG3
Poster Session: Cryotechnique

TT 55 15:00 — 19:00 P2-OG3
Poster Session: Superconductivity 2

TT 56 15:00 — 19:00 P2-OG4
Poster Session: Low-Dimensional Systems

Working Group on Accelerator physics (AKBP)

Sessions

AKBP 4 09:30 — 12:00 MOL 213
Radiofrequency and Beam Dynamics

AKBP 5 15:00 — 17:45 MOL 213
Hadron and Electron Accelerators

AKBP 6 18:30 — 20:00 P4
Poster Session

Working Group „Young DPG“ (AGjDPG)

Tutorials

AGjDPG 4.1 09:30 — 12:30 HSZ 301
Workshop on crafting the story of a competitive grant application.
•*Tobias Klose*

AGjDPG 5.1 15:00 — 18:00 HSZ 301
Projekt Startup
•*Marco Rösler*

Sessions

AGjDPG 4 09:30 — 12:30 HSZ 301
Workshop on crafting the story of a competitive grant application

AGjDPG 5 15:00 — 18:00 HSZ 301
Projekt Startup

Physik-LehrerInnen-Tage (LT)

Workshop

LT 1.1 15:15 — 17:15 REC/PHY B214
Tablets und Inklusion – Unterstützung von Schülerexperimenten durch Tablets im inklusiven Physikunterricht
•*Andre Bresges*

Session

LT 1 15:15 — 17:15 REC/PHY B214
Digitale Medien und Inklusion

Job Market

13:15 — 14:15 HSZ 405
Forschungszentrum Jülich GmbH – „Karrierewege in der Physik – Forschungszentrum Jülich“

Exhibition on Scientific Instruments and Literature

09:00 — 17:00 Foyer HSZ, Tents A/B

Thursday, March 23, 2017

Plenary Talks

PV XIX 08:30 — 09:15 HSZ 01
Model systems in heterogeneous catalysis at the atomic level
•Hans-Joachim Freund

PV XXIII 14:00 — 14:45 HSZ 01
Bottom-up fabrication of graphene nanoribbons: From molecules to devices
•Roman Fasel

PV XXIV 14:00 — 14:45 HSZ 02
Novel Phase Change Materials by Design: The Mystery of Resonance Bonding
•Matthias Wuttig

Prize Talks

PV XX 13:15 — 13:45 HSZ 01
Exotic Spin-Orbital Order in Transition Metal Oxides
•Andrzej M. Oles (Laureate of the Smoluchowski-Warburg-Prize 2017)

PV XXII 13:15 — 13:45 HSZ 03
Controlling Light Fields with Mie-Resonant Dielectric Metasurfaces
•Isabelle Staude (Laureate of the Hertha-Sponer-Prize 2017)

Lunch Talk

PV XXI 13:15 — 13:45 HSZ 02
Berufsbild Physiker(in) ausserhalb universitärer und industrieller Forschung
•Udo Weigelt

Symposium Optics and Light-Matter Interaction with Excitons in 2D Materials (SYLM)

Invited Talks

SYLM 1.1 15:00 — 15:30 HSZ 02
Light matter interaction in TMDs and their heterostructures
•Ursula Wurstbauer

SYLM 1.2 15:30 — 16:00 HSZ 02
Quantum optics with deterministically positioned quantum emitters in a two-dimensional semiconductor
•Brian Gerardot

SYLM 1.3 16:00 — 16:30 HSZ 02
Light-matter coupling with atomic monolayers in microcavities
•Christian Schneider

SYLM 1.4 17:00 — 17:30 HSZ 02
Properties of Synthetic 2D Materials and Heterostructures
•Joshua Robinson

SYLM 1.5 17:30 — 18:00 HSZ 02
Exciton spectroscopy in transition metal dichalcogenide monolayers and van der Waals heterostructures
•Bernhard Urbaszek

SYLM 1.6 18:00 — 18:30 HSZ 02
Strain-induced single-photon emitters in layered semiconductors
•Rudolf Bratschitsch

Session

SYLM 1 15:00 — 18:30 HSZ 02
Optics and Light-Matter Interaction with Excitons in 2D Materials (SYLM)

Symposium Quantum Optics on the Nanoscale: From Fundamental Physics to Quantum Technologies (SYQO)

Invited Talks

SYQO 1.1 09:30 — 10:00 HSZ 02
Quantum dot based quantum technologies
•Pascale Senellart

SYQO 1.2 10:00 — 10:30 HSZ 02
Controlled strong coupling of a single quantum dot to a plasmonic nanoresonator at room temperature
Heiko Groß, Joachim M. Hamm, Tommaso Tufarelli, Ortwin Hess, •Bert Hecht

SYQO 1.3 10:30 — 11:00 HSZ 02
High efficiency and directional emission from a nanoscale light source in a planar optical antenna
•*Mario Agio*

SYQO 1.4 11:30 — 12:00 HSZ 02
Tailoring quantum states by measurement
•*Jörg Wrachtrup*

SYQO 1.5 12:00 — 12:30 HSZ 02
Quantum optics and quantum control at the nanoscale with surface plasmon polaritons
•*Stéphane Guérin*

Session

SYQO 1 09:30 — 12:30 HSZ 02
Quantum Optics on the Nanoscale: From Fundamental Physics to Quantum Technologies

Biological Physics Division (BP)

Invited Talks

BP 47.1 09:30 — 10:00 ZEU 250
Mechanotransduction in Collective Cell Migration
•*Joachim Spatz*

BP 48.1 09:30 — 10:00 HÜL 386
Shaping membranes: ENTH activity as a function of membrane tension
•*Claudia Steinem, Martin Gleisner, Benjamin Kroppen, Nelli Teske, Andreas Janshoff, Michael Meinecke*

BP 49.1 09:30 — 10:00 SCH A251
The Origin of Cellular Life
•*Jack W Szostak*

BP 55.1 15:00 — 15:30 HÜL 386
Network heterogeneity regulates steering in actin-based motility
•*Laurent Blanchoin*

BP 56.1 15:00 — 15:30 SCH A251
Biophysical Studies of Amyloid Formation and Its Inhibition
•*Sheena Radford*

Sessions

BP 46 09:30 — 13:00 HÜL 186
Active Matter II (Joint Session DY/BP/CPP)

BP 47 09:30 — 10:45 ZEU 250
Cell Adhesion

BP 48 09:30 — 13:00 HÜL 386
Membranes and Vesicles II

BP 49 09:30 — 13:00 SCH A251
Physics of the Genesis of Life – Focus Session organised by Moritz Kreysing and Dieter Braun

BP 50 09:30 — 13:00 GÖR 226
Networks: From Topology to Dynamics I (Joint Session SOE/DY/BP)

BP 51 11:15 — 12:45 ZEU 250
Microswimmers III (Joint Session BP/DY)

BP 52 15:00 — 18:00 ZEU 260
Topological Problems in the Physics of Polymers, Biopolymers and Fibers I (Joint Focus Session CPP/BP)

BP 53 15:00 — 17:00 ZEU 118
Pattern Formation (Joint Session DY/BP)

BP 54 15:00 — 17:30 ZEU 250
Statistical Physics of Biological Systems I (Joint Session BP/DY)

BP 55 15:00 — 17:15 HÜL 386
Cell Migration and Contraction

BP 56 15:00 — 17:30 SCH A251
Protein Structure and Dynamics

BP 57 15:00 — 16:15 ZEU 147
Networks: From Topology to Dynamics II (Joint Session DY/BP/SOE)

Chemical and Polymer Physics Division (CPP)

Invited Talks

CPP 53.1 09:30 — 10:00 ZEU 222
Interplay of Order and Disorder in Self-assembled Optical Metamaterials
•Ullrich Steiner

CPP 55.1 10:15 — 10:45 ZEU 222
Understanding charge transport in crystalline organic semiconductors
•Simone Fratini, Sergio Ciuchi, Alessandro Troisi, Didier Mayou

CPP 55.2 10:45 — 11:15 ZEU 222
Mapping of trap densities and contact resistance in organic devices and their relation to structural disorder
•Bert Nickel, Clemens Liewald, Simone Strohmair, Eric Glowacki, Andrey Turchanin

CPP 56.1 10:15 — 10:45 ZEU 260
Functional microgels: simple matter where complexity matters
•Walter Richtering

CPP 58.4 11:00 — 11:30 ZEU 255
Molecular Scale Structure of Ionic Liquid Surfaces
•Markus Mezger

CPP 59.1 15:00 — 15:30 ZEU 222
Charge transport modeling in disordered molecular semiconductors: from the molecule to the device
Andrea Massé, Feilong Liu, Pascal Friederich, Franz Symalla, Velimir Meded, Wolfgang Wenzel, Reinder Coehoorn, •Peter A. Bobbert

CPP 59.2 15:30 — 16:00 ZEU 222
Charge transport in high mobility molecular semiconductors
•Henning Sirringhaus

CPP 60.1 15:00 — 15:30 ZEU 260
Polymers in the cell nucleus
•Maria Barbi, Antony Lesage, Jean-Marc Victor

CPP 60.6 16:45 — 17:15 ZEU 260
Knots as Stable Topological Order Parameter for Semiflexible Polymers
•*Wolfhard Janke, Martin Marenz*

Sessions

CPP 53 09:30 — 10:00 ZEU 222
Keynote Lecture III

CPP 54 09:30 — 13:00 HÜL 186
Active Matter II (joint session DY/BP/CPP, organised by DY)

CPP 55 10:15 — 13:00 ZEU 222
Focus: Static and Dynamic Disorder Phenomena on the Transport in Organic Semiconductors I

CPP 56 10:15 — 13:00 ZEU 260
Hydrogels and Microgels I

CPP 57 10:15 — 13:00 ZEU 114
Thin Films, Nanostructures and Nanoparticles I

CPP 58 10:15 — 12:45 ZEU 255
Fluids and Interfaces II

CPP 59 15:00 — 18:00 ZEU 222
Focus: Static and Dynamic Disorder Phenomena on the Transport in Organic Semiconductors II

CPP 60 15:00 — 18:00 ZEU 260
Focus: Topological Problems in the Physics of Polymers, Biopolymers and Fibers I (joint session BP/CPP, organised by CPP)

CPP 61 15:00 — 17:00 ZEU 114
Charged Soft Matter, Ionic Liquids and Polyions II

CPP 62 15:00 — 18:15 ZEU 255
Fluids and Interfaces III

18:30 — 19:15 ZEU 222
Annual General Meeting
of the Chemical and Polymer Physics Division

Dielectric Solids Division (DF)

Topical Talks

DF 17.1 09:30 — 10:00 WIL B321
Magnetic and orbital excitations in the multiferroic skyrmion host GaV_4S_8
Dieter Ehlers, Zhe Wang, Hans-Albrecht Krug von Nidda, Vladimir Tsurkan, Peter Lunkenheimer, Istvan Kézsmárki, Ioannis Stasinopoulos, Dirk Grundler, •Alois Loidl

DF 17.9 12:15 — 12:45 WIL B321
Role of charged defects on conduction and dynamics of domain walls in $BiFeO_3$
•Tadej Rojac, Andreja Bencan, Goran Drazic, Naonori Sakomoto, Hana Ursic, Bostian Jancar, Gasper Tavcar, Maja Makarovic, Julian Walker, Barbara Malic, Dragan Damjanovic

Sessions

DF 17 09:30 — 13:30 WIL B321
Ferroics – Domains, Domain Walls and Skyrmions IV

DF 18 15:00 — 17:15 WIL B321
Multiferroics (DF and MA)

Thin Films Division (DS)

Topical Talks

DS 38.1 09:30 — 10:00 CHE 89
Memristive devices for neuromorphic systems
•Martin Ziegler

DS 38.2 10:00 — 10:30 CHE 89
Learning in Silico: neuromorphic models of long-term plasticity
•Elisabetta Chicca

DS 38.6 11:30 — 12:00 CHE 89
Design and CMOS Co-Integration of ReRAM Devices and Crossbar Arrays for Neuromorphic Applications
•Yusuf Leblebici

DS 38.7 12:00 — 12:30 CHE 89
Neuromorphic Memristive Systems
•Bernabe Linares-Barranco

DS 40.1 15:00 — 15:30 CHE 89
Brain-inspired neurocomputing with memristive synapses
•Daniele Ielmini

DS 40.2 15:30 — 16:00 CHE 89
Exploring evolutionary biology and neuromorphic computing with quantum materials
•Shriram Ramanathan

Sessions

DS 37 09:30 — 13:00 HSZ 03
Focus Session on 2D Materials: Ballistic Quantum Transport in Graphene (jointly with HL, MA, TT)

DS 38 09:30 — 13:15 CHE 89
Focussed Session: Memristive Devices for Neuronal Systems I

DS 39 09:30 — 13:15 CHE 91
Thin Film Applications

DS 40 15:00 — 16:45 CHE 89
Focussed Session: Memristive Devices for Neuronal Systems II

DS 41 15:00 — 16:45 CHE 91
Layer Properties: Electrical, Optical, and Mechanical Properties II

DS 42 15:00 — 17:45 WIL C107
Metallic Nanowires on Semiconductor Surfaces (jointly with O)

DS 43 17:00 — 17:30 CHE 91
Quantum Optics at the Nanoscale: From Fundamental Physics to Quantum Technologies (Joint Session HL, DS, O, and TT, organised by DS)

DS 44 17:00 — 19:00 P1C
Postersession II

Dynamics and Statistical Physics Division (DY)

Invited Talks

DY 41.1 09:30 — 10:00 HÜL 186
Rolling, rolling, rolling – a new self-propulsion mechanism
•Falko Ziebert, Igor Kulic

DY 42.1 09:30 — 10:00 ZEU 160
Equilibration and ensembles in coherent quantum systems
•Fabian Essler

Sessions

DY 41 09:30 — 13:00 HÜL 186
Active Matter II (joint session DY/BP/CPP)

DY 42 09:30 — 13:15 ZEU 160
Coherent Quantum Dynamics (joint session DY/TT)

DY 43 09:30 — 13:15 ZEU 118
Nonlinear Dynamics, Synchronizsation and Chaos

DY 44 10:00 — 12:15 ZEU 147
Statistical Physics (general)

DY 45 11:15 — 12:45 ZEU 250
Microswimmers (joint session BP/DY)

DY 46 15:00 — 16:00 HÜL 186
Modelling and Data Analysis

DY 47 15:00 — 16:30 ZEU 160
Complex Fluids and Soft Matter I (joint session DY/CPP)

DY 48 15:00 — 17:00 ZEU 118
Pattern Formation / Reaction-Diffusion II (joint session DY/BP)

DY 49 15:00 — 16:15 ZEU 147
Networks: From Topology to Dynamics (joint session DY/ BP/SOE)

DY 50 15:00 — 17:30 ZEU 250
Statistical Physics of Biological Systems I (Joint Session BP/DY)

DY 51 16:15 — 17:00 HÜL 186
Extreme Events

DY 52 16:30 — 17:00 ZEU 147
Chimera states: symmetry-breaking in dynamical networks (joint session DY/BP/SOE)

DY 53 17:00 — 19:30 P1A
Posters – Active Matter

DY 54 17:00 — 19:30 P1A
Posters – Pattern Formation, Reaction Diffusion, Chimera

DY 55 17:00 — 19:30 P1A
Posters – Soft Matter, Glasses

DY 56 17:00 — 19:30 P1A
Posters – Granular and Particulate Matter

DY 57 17:00 — 19:30 P1A
Posters – Turbulence

DY 58 17:00 — 19:30 P1A
Posters – Networks

DY 59 17:00 — 19:30 P1A
Posters – Nonlinear General

DY 60 17:00 — 19:30 P1A
Posters – Brownian Motion, Noise

DY 61 17:00 — 17:00 P1A
Posters – Quantum Systems

19:30 — 20:30 ZEU 160
Annual General Meeting of the Dynamics and Statistical Physics Division

Semiconductor Physics Division (HL)

Invited Talks

HL 67.5 10:45 — 11:15 POT 81
2D Quasicrystals from Semiconducting Perovskite Oxides
•*Wolf Widdra, Stefan Förster*

HL 68.1 09:30 — 10:00 POT 51
Solar-driven photoelectrochemical water splitting and carbon dioxide reduction
•Joel Ager

HL 68.4 10:30 — 11:00 POT 51
Quantum confined colloidal semiconductor nanocrystals for solar fuels
•Frank Jäckel

HL 68.7 12:00 — 12:30 POT 51
Photo-electrochemistry modelling beyond idealised surfaces and the computational hydrogen electrode
•Harald Oberhofer

HL 70.1 09:30 — 10:00 POT 251
Sub-nm probing of Topological insulators and Rashba systems
•Markus Morgenstern

HL 75.1 14:45 — 15:15 POT 151
Spectroscopy on self-assembled quantum dots: Transport meets optics
•Martin Geller

Sessions

HL 65 09:30 — 12:30 HSZ 02
Quantum Optics on the Nanoscale: From Fundamental Physics to Quantum Technologies (joined session, HL, DS, O, TT, organised by HL)

HL 66 09:30 — 13:00 HSZ 03
Focus Session on 2D Materials: Ballistic Quantum Transport in Graphene (jointly with DY, DS, HL, MA, O)

HL 67 09:30 — 11:15 POT 81
Perovskites, Hybrid Photovoltaics and Plasmonics

HL 68 09:30 — 12:30 POT 51
Focus Session: Semiconductor Materials and Nanostructure for Photocatalysis

HL 69 09:30 — 12:30 POT 151
Quantum Dots: Transport Properties I

HL 70 09:30 — 12:45 POT 251
Topological Insulators I (joined session with TT)

HL 71 09:30 — 11:30 POT 112
Transport Properties

HL 72 09:30 — 11:45 POT 06
Nitrides: Devices

HL 73 10:30 — 13:45 GER 38
Electronic-Structure Theory: New Concepts and Developments in Density Functional Theory and Beyond – VI

HL 74 12:00 — 13:15 POT 06
Group IV: Si/Ge/SiC

HL 75 14:45 — 16:15 POT 151
Quantum Dots: Transport Properties II

HL 76 14:45 — 16:45 POT 251
Topological Insulators II (joined session with TT)

HL 77 14:45 — 16:30 POT 112
Transport in High Magnetic Fields

HL 78 15:00 — 18:30 HSZ 02
Optics and Light-Matter Interaction with Excitons in 2D Materials (SYLM) (joined session DS, DY, HL, TT, organised by HL)

HL 79 15:00 — 19:00 P2-OG3
Poster: New Materials

HL 80 16:00 — 18:30 GER 38
Electronic-Structure Theory: New Concepts and Developments in Density Functional Theory and Beyond – VII

18:00 — 19:00 POT 81
Annual General Meeting of the Semiconductor Physics Division

Magnetism Division (MA)

Invited Talks

MA 53.1 15:00 — 15:30 HSZ 01
Topological phases for magnons and electrons in the skyrmion lattice
•*Joaquín Fernandez-Rossier*

MA 53.2 15:30 — 16:00 HSZ 01
Thermal Hall Effect of Spin Excitations in Quantum Magnets
•*Max Hirschberger, Robin Chisnell, Jason W. Krizan, Young S. Lee, Robert J. Cava, N. Phuan Ong*

MA 53.3 16:15 — 16:45 HSZ 01
Magnon-mediated Dzyaloshinskii-Moriya torques, heat pumping, and spin Nernst effect
•*Alexey Kovalev*

MA 53.4 16:45 — 17:15 HSZ 01
Magnon companion pieces to electronic topological materials
•*Alexander Mook, Jürgen Henk, Ingrid Mertig*

MA 53.5 17:15 — 17:45 HSZ 01
Nonreciprocal propagation of elementary excitations in noncentrosymmetric magnets
•*Yoshinori Onose*

Sessions

MA 46 09:30 — 13:00 HSZ 03
Focus Session on 2D Materials: Ballistic Quantum Transport in Graphene (jointly with DY, DS, HL, MA, O)

MA 47 09:30 — 13:15 HSZ 04
Spin Hall Effects and Skyrmions I

MA 48 09:30 — 13:15 HSZ 101
Spin Dynamics and Transport: Spin Excitations and Spin Torque Phenomena

MA 49 09:30 — 12:30 HSZ 401
Surface Magnetism 2 (Joint Session with O)

MA 50 09:30 — 12:00 HSZ 403
Spincaloric Transport (jointly with TT)

MA 51 09:30 — 12:45 POT 251
Topological Insulators I (joined session with TT)

MA 52 14:45 — 16:45 POT 251
Topological Insulators II (joined session with TT)

MA 53 15:00 — 17:45 HSZ 01
Focus Session: Topology meets Magnetism

MA 54 15:00 — 18:00 HSZ 04
Spin Hall Effects and Skyrmions II

MA 55 15:00 — 18:00 HSZ 101
Thin Films: Magnetic Anisotropy

MA 56 15:00 — 18:00 HSZ 403
Bulk Materials: Soft and hard permanent magnets

MA 57 15:00 — 17:15 WIL B321
Multiferroics (DF and MA)

18:00 — 19:00 HSZ 04
Annual General Meeting of the Magnetism Division

Microprobes Division (MI)

Sessions

MI 8 10:00 — 11:00 MER 02
Scanning Probe Microscopy (SPM)

MI 9 11:15 — 11:45 MER 02
Progress of Instrumentation and Methods for the Surface Analysis (PEEM, LEED)

MI 10 12:00 — 12:30 MER 02
Positron Annihilation Spectroscopy (PALS)

MI 11 15:00 — 16:00 MER 02
Annual General Meeting and Celebration of the 50th Anniversary of the Microprobes Division

Metal and Material Physics Division (MM)

Invited Talks, Topical Talks

MM 54.1 09:30 — 10:00 BAR 205
Revealing the mechanism of Z-phase formation in 12% Cr ferritic-martensitic steels
•Daniel F. Urban, Christian Elsässer

MM 56.1 10:15 — 10:45 IFW A
Anomalous atomic motion in metallic glasses revealed by coherent X-rays
•Beatrice Ruta

MM 61.1 11:45 — 12:15 IFW A
Towards a dissipative atomic-scale theory of the dynamical response of metallic glasses
•Alessio Zaccone

MM 64.1 15:00 — 15:30 BAR 205
Microstructural refinement, rate sensitivity and structural stability of Cu-X solid solutions after severe plastic deformation
•Karsten Durst

MM 66.1 15:45 — 16:15 IFW A
Molecular Dynamics Simulation On The Avalanche Dynamics and the microstructural evolution in the so called elastic region of the Cu50Zr50
•Alexandra Lagogianni, Marius Milnikel, Konrad Samwer

Sessions

MM 54 09:30 — 10:00 BAR 205
Invited talk Urban

MM 55 10:15 — 11:45 BAR 205
Topical session: Data driven materials design – structure maps

MM 56 10:15 — 11:30 IFW A
Topical session: Dynamics, relaxation and deformation in deeply supercooled metallic liquids and glasses – kinetic transitions

MM 57 10:15 — 11:15 IFW B
Microstructure and Phase Transformations – transformation kinetics

MM 58 10:15 — 11:45 IFW D
Nanomaterials I

MM 59 10:30 — 13:45 GER 38
Electronic Structure Theory: New Concepts and Developments in Density Functional Theory and Beyond – VI

MM 60 12:00 — 13:15 BAR 205
Topical session: Data driven materials design – machine learning

MM 61 11:45 — 13:15 IFW A
Topical session: Dynamics, relaxation and deformation in deeply supercooled metallic liquids and glasses V – dynamical response

MM 62 11:45 — 13:00 IFW B
Microstructure and Phase Transformations – nucleation kinetics and pressure effects

MM 63 12:00 — 13:30 IFW D
Nanomaterials II

MM 64 15:00 — 15:30 BAR 205
Invited talk Durst

MM 65 15:45 — 16:30 BAR 205
Topical session: Data driven materials design – uncertainity approaches

MM 66 15:45 — 17:15 IFW A
Topical session: Dynamics, relaxation and deformation in deeply supercooled metallic liquids and glasses VI – mechanical properties

MM 67 15:45 — 16:45 IFW D
Mechanical Properties I

MM 68 16:00 — 18:30 GER 38
Electronic Structure Theory: New Concepts and Developments in Density Functional Theory and Beyond – VII

MM 69 17:30 — 19:00 IFW A
Topical session: Dynamics, relaxation and deformation in deeply supercooled metallic liquids and glasses VII – thermodynamics and structure

MM 70 17:00 — 18:15 IFW D
Mechanical Properties II

Surface Science Division (O)

Invited Talks

O 83.1 09:30 — 10:15 TRE Phy
Molecular adsorption on oxide surfaces: Insights from first-principles calculations
•*Bernd Meyer*

O 87.1 10:30 — 11:00 WIL C307
Structure and redox dynamics of ultrathin ceria films and nanostructures
•*Jan Ingo Flege*

O 93.1 15:00 — 15:30 TRE Phy
Oxygen and Oxide Cluster Functionalized Graphene for Model Catalytic Studies
•*Zdenek Dohnalek*

O 93.2 15:30 — 16:00 TRE Phy
Oxide model interfaces from ultrahigh vacuum conditions to liquid environments
•*Jörg Libuda*

O 95.1 15:00 — 15:30 WIL A317
Visualizing surface X-ray diffraction: the active phase of CO oxidation model catalysts
•*Johan Gustafson*

O 97.1 15:00 — 15:30 REC/PHY C213
The challenge of atomic resolution in liquid and ambient conditions with AFM
•*Alfred J. Weymouth*

O 97.2 15:30 — 16:00 REC/PHY C213
Single-molecule magnets: The influence of the surface
•*Katharina Diller*

O 98.1 15:00 — 15:30 WIL C307
Spin-charge transport phenomena on the atomic scale
•*Christoph Tegenkamp*

O 98.2 15:30 — 16:00 WIL C307
Electronic properties of functional organic materials at surfaces
•*Petra Tegeder*

O 99.1 16:00 — 16:30 GER 38
Spectacular success of DFT in predicting novel topological phases
•*Arun Bansil*

O 101.1 17:00 — 17:30 TRE Phy
Density Functional Theory in Surface Science and Catalysis – Successes and Limitations
•*Felix Studt*

Sessions

O 83 09:30 — 10:15 TRE Phy
Overview Talk: Bernd Meyer

O 84 09:30 — 12:30 POT 51
Focus Session: Semiconductor Materials and Nanostructure for Photocatalysis

O 85 10:15 — 13:00 ZEU 114
Thin Films, Nanostructures and Nanoparticles I

O 86 10:30 — 13:00 WIL A317
Graphene: Electronic Properties, Structure and Substrate Interaction I

O 87 10:30 — 13:00 WIL C307
Metal Substrates: Structure, Epitaxy and Growth

O 88 10:30 — 13:45 GER 38
Electronic Structure Theory: New Concepts and Developments in Density Functional Theory and Beyond – VI

O 89 10:30 — 12:45 TRE Phy
Oxide and Insulator Surfaces: Adsorption III

O 90 10:30 — 12:45 WIL C107
Surface Dynamics: Experiments

O 91 10:30 — 13:00 REC/PHY C213
Nanostructures at Surfaces: Molecular Systems I

O 92 10:30 — 13:00 TRE Ma
Gerhard Ertl Young Investigator Award

O 93 15:00 — 17:00 TRE Phy
Heterogeneous Catalysis: Experiment

O 94 15:00 — 18:15 TRE Ma
Graphene: Electronic Properties, Structure and Substrate Interaction II

O 95 15:00 — 18:15 WIL A317
Metal Substrates: Adsorption of Atoms and Inorganic Molecules

O 96 15:00 — 17:45 WIL C107
Metallic Nanowires on Semiconductor Surfaces

O 97 15:00 — 18:30 REC/PHY C213
Nanostructures at Surfaces: Molecular Systems II

O 98 15:00 — 16:00 WIL C307
Nanostructures at Surfaces: 1D Systems

O 99 16:00 — 18:30 GER 38
Electronic Structure Theory: New Concepts and Developments in Density Functional Theory and Beyond – VII

O 100 16:00 — 18:30 WIL C307
Electronic Structure of Surfaces: Spectroscopy, Surface States II

O 101 17:00 — 18:30 TRE Phy
Heterogeneous Catalysis: Theory I

O 102 17:45 — 18:30 WIL C107
New Methods: Theory

O 103 19:00 — 19:30 HSZ 01
Annual General Meeting of the Surface Science Division

O 104 19:30 — 20:30 HSZ 01
Post-Deadline Session

Physics of Socio-economic Systems Division (SOE)

Sessions

SOE 16 09:30 — 13:00 GÖR 226
Networks (joint session SOE / DY / BP)

SOE 17 15:00 — 16:15 ZEU 147
Networks: From Topology to Dynamics (joint session DY/ BP/SOE)

SOE 18 15:00 — 16:15 GÖR 226
Economic Models II

SOE 19 16:15 — 17:00 GÖR 226
Financial Markets and Risk Management II

SOE 20 16:30 — 17:00 ZEU 147
Chimera states: symmetry-breaking in dynamical networks (joint session DY/BP/SOE)

SOE 21 17:00 — 18:30 GÖR 226
Social Systems II

Low Temperature Physics Division (TT)

Invited Talks

TT 58.1 09:30 — 10:00 HSZ 03
Kondo Screening of a Vacancy Magnetic Moment in Graphene
•*Eva Y. Andrei*

TT 58.2 10:00 — 10:30 HSZ 03
Higher-Than-Ballistic Conduction in Viscous Electron Fluids
•*Leonid Levitov*

TT 58.3 10:30 — 11:00 HSZ 03
Electron Optics in Ballistic Graphene
•*Ming-Hao Liu*

TT 58.4 11:15 — 11:45 HSZ 03
Ballistic Transport in Mesoscopic Graphene Devices
•*Christoph Stampfer*

TT 58.5 11:45 — 12:15 HSZ 03
Interaction-Induced Conductance from Zero Modes in a Magnetic Graphene Waveguide
•*Alex Zazunov*

TT 62.7 11:15 — 11:45 HSZ 304
Optical Control of Complex Quantum Materials
•*Stefan Kaiser*

TT 69.1 15:00 — 15:30 HSZ 03
The Antiferromagnet $YbRh_2Si_2$ - a New Heavy-Fermion Superconductor
•*Frank Steglich*

TT 69.2 15:30 — 16:00 HSZ 03
Quantum Criticality in Cuprate and Iron Based Superconductors
•*Antony Carrington*

TT 69.3 16:00 — 16:30 HSZ 03
Evolution of the Fermi Surface of the Nematic Superconductors $FeSe_{1-x}S_x$
•*Amalia Coldea*

TT 69.4 16:45 — 17:15 HSZ 03
Superconductivity near Structural Instabilities
•*Malte Grosche*

TT 69.5 17:15 — 17:45 HSZ 03
An Empirical Approach to the 2 mK Transition in $YbRh_2Si_2$
•*Christoph Geibel, Manuel Brando, Alexander Steppke*

TT 70.1 15:00 — 15:30 HSZ 103
New Developments in the Theory of STM on Unconventional Superconductors
•*Andreas Kreisel*

Sessions

TT 57 09:30 — 12:30 HSZ 02
SYQO: Quantum Optics on the Nanoscale: From Fundamental Physics to Quantum Technologies (joint symposium HL,DS,O,TT, organised by HL)

TT 58 09:30 — 13:00 HSZ 03
Focus Session on 2D Materials: Ballistic Quantum Transport in Graphene (jointly with DY, DS, HL, MA, O)

TT 59 09:30 — 12:15 HSZ 103
Superconductivity: Fe-based Superconductors – FeSe and others

TT 60 09:30 — 13:15 HSZ 201
Correlated Electrons: f-Electron Systems

TT 61 09:30 — 13:00 HSZ 204
Correlated Electrons: (General) Theory 2

TT 62 09:30 — 13:00 HSZ 304
Correlated Electrons: Nonequilibrium Quantum Many-Body Systems 1

TT 63 09:30 — 12:00 HSZ 403
Spincaloric Transport (joint session MA, TT, organised by MA)

TT 64 09:30 — 13:15 ZEU 160
Coherent Quantum Dynamics (joint session DY, TT, organised by DY)

TT 65 09:30 — 12:45 POT 251
Topological Insulators I (joint session DS, HL, MA, O, TT, organised by HL)

TT 66 10:30 — 13:00 WIL A317
Graphene: Electronic Properties, Structure and Substrate Interaction I (joint session DY, DS, HL, MA, O, TT, organised by O)

TT 67 14:45 — 16:45 POT 251
Topological Insulators II (joint session DS, HL, MA, O, TT, organised by HL)

TT 68 15:00 — 18:30 HSZ 02
SYLM: Optics and Light-Matter Interaction with Excitons in 2D Materials (joint symposium DS, DY, HL, TT, organised by HL)

TT 69 15:00 — 18:15 HSZ 03
Focus Session: Superconductivity in the Vicinity of a Quantum Critical Point

TT 70 15:00 — 18:15 HSZ 103
Superconductivity: Fe-based Superconductors – Theory

TT 71 15:00 — 18:00 HSZ 201
Superconductivity: Cryodetectors and Cryotechnique

TT 72 15:00 — 18:30 HSZ 204
Correlated Electrons: Frustrated Magnets – General 2

TT 73 15:00 — 18:00 HSZ 304
Correlated Electrons: Nonequilibrium Quantum Many-Body Systems 2

TT 74 15:00 — 18:15 TRE Ma
Graphene: Electronic Properties, Structure and Substrate Interaction II (joint session DY, DS, HL, MA, O, TT, organised by O)

TT 75 15:00 — 19:00 P2-EG
Poster Session: Transport 1

TT 76 15:00 — 19:00 P2-OG1
Poster Session: Transport 2

TT 77 16:00 — 18:30 GER 38
Electronic-Structure Theory: New Concepts and Developments in Density Functional Theory and Beyond – VI (joint session DS, HL, MA, MM, O, TT, organised by O)

TT 78 17:00 — 17:30 CHE 91
Quantum Optics at the Nanoscale: From Fundamental Physics to Quantum Technologies (joint session HL, DS, O, and TT, organised by DS)

19:00 — 20:30 HSZ 304
Annual General Meeting
of the Low Temperature Physics Division

Working Group on Accelerator Physics (AKBP)

Sessions

AKBP 7 09:30 — 12:45 MOL 213
Synchrotron Radiation and FELs

AKBP 8 15:00 — 17:45 MOL 213
Diagnostics, Control, Instrumentation

18:00 — 19:00 MOL 213
Annual General Meeting of the Working Group on Accelerator Physics

Job Market

12:00 — 13:00 HSZ 405
d-fine – „Physiker (m/w) im Bereich Risiko und Finanzen“

14:30 — 15:30 HSZ 405
Boston Consulting – „Als Naturwissenschaftler in die Strategieberatung“

Exhibition on Scientific Instruments and Literature

09:00 — 17:00 Foyer HSZ, Tents A/B

Friday, March 24, 2017

Plenary Talk

PV XXV 08:30 — 09:15 HSZ 01
The European XFEL – Status and first commissioning results
•Hans Weise

Symposium Frontiers of Electronic Structure Theory (SYES)

Invited Talks

SYES 1.1 10:30 — 11:00 HSZ 02
Going Beyond Conventional Functionals with Scaling Corrections and Pairing Fluctuations
•Weitao Yang

SYES 1.2 11:00 — 11:30 HSZ 02
Multi-reference density functional theory
•Andreas Savin

SYES 1.3 11:30 — 12:00 HSZ 02
Density functionals from machine learning
•Kieron Burke

SYES 1.4 12:00 — 12:30 HSZ 02
Taming Memory-Dependence in Time-Dependent Density Functional Theory
•Neepa Maitra

SYES 1.5 12:30 — 13:00 HSZ 02
Quantum Embedding Theories
•Fred Manby

Session

SYES 1 10:30 — 13:00 HSZ 02
Frontiers of Electronic-Structure Theory: New Concepts and Developments in Density Functional Theory and Beyond

Biological Physics Division (BP)

Invited Talks

BP 59.1 09:30 — 10:00 HÜL 386
Spatially-resolved transcriptomics and single-cell lineage tracing
•*Jan Philipp Junker*

BP 60.1 09:30 — 10:00 SCH A251
Spontaneous curvature and membrane curling for malaria-infected erythrocytes
•*Manouk Abkarian, Octavio Albarran Arriagada, Gladys Massiera, Cyril Claudet, Andrew Callan Jones, Vladimir Lorman, Catherine Braun Breton*

Sessions

BP 58 09:30 — 10:45 ZEU 250
DNA & RNA

BP 59 09:30 — 11:00 HÜL 386
Multi-Cellular-Systems

BP 60 09:30 — 12:15 SCH A251
Physics of Parasites – Joint Focus Session (BP/DY) organised by Holger Stark

BP 61 10:15 — 13:00 ZEU 222
Topological Problems in the Physics of Polymers, Biopolymers and Fibers II (Joint Focus Session CPP/BP)

Chemical and Polymer Physics Division (CPP)

Invited Talks

CPP 63.1 09:30 — 10:00 ZEU 222
Stimuli-Responsive and Switchable Polymer Brushes: Theoretical Concepts and Computer Simulations
•*Jens-Uwe Sommer*

CPP 67.4 11:00 — 11:30 ZEU 222
Protein Folding under Mechanical Load
•*Matthias Rief*

CPP 67.6 12:00 — 12:30 ZEU 222
All-atom simulations of folding of proteins with topologically complex native structures.
•Pietro Faccioli, Silvio a Beccara

CPP 70.5 11:15 — 11:45 ZEU 255
Charge transfer states for organic opto-electronics
•Koen Vandewal

Sessions

CPP 63 09:30 — 10:00 ZEU 222
Keynote Lecture IV

CPP 64 09:30 — 11:45 CHE 91
Organic-Inorganic Hybride Interfaces (joint session CPP/DS/HL, organised by DS)

CPP 65 09:30 — 12:30 HÜL 186
Complex Fluids and Soft Matter (organised by DY)

CPP 66 10:00 — 12:30 ZEU 118
Glasses and Glass Transition (joint session DY/CPP/DF, organised by DY)

CPP 67 10:15 — 13:00 ZEU 222
Focus: Topological Problems in the Physics of Polymers, Biopolymers and Fibers II (joint session BP/CPP, organised by CPP)

CPP 68 10:15 — 13:15 ZEU 260
Hydrogels and Microgels II

CPP 69 10:15 — 13:00 ZEU 114
Thin Films, Nanostructures and Nanoparticles II

CPP 70 10:15 — 13:15 ZEU 255
Organic Electronics and Photovoltaics V: OPV (joint session CPP/DS/HL, organised by CPP)

CPP 71 10:30 — 13:00 HSZ 02
Frontiers of Electronic-Structure Theory: New Concepts and Developments in Density Functional Theory and Beyond

Dielectric Solids Division (DF)

Session

DF 19 10:00 — 12:30 ZEU 118
Glasses and Glass Transition (CPP with DF)

Thin Films Division (DS)

Sessions

DS 45 09:30 — 11:30 HSZ 03
Transport: Spintronics, Spincalorics and Magnetotransport (jointly with HL, MA)

DS 46 09:30 — 11:00 CHE 89
Ion and Electron Beam Induced Processes

DS 47 09:30 — 11:45 CHE 91
Organic-Inorganic Hybride Interfaces

DS 48 09:30 — 12:45 POT 51
Oxide Semiconductors (jointly with HL)

DS 49 10:30 — 13:00 HSZ 02
Frontiers of Electronic-Structure Theory: New Concepts and Developments in Density Functional Theory and Beyond (SYES)

DS 50 11:15 — 12:15 CHE 89
Optics and Light-Matter Interaction with Excitons in 2D Materials\\(Joint Session HL, DS, O, and TT, organised by DS)

Dynamics and Statistical Physics Division (DY)

Invited Talks

DY 62.1 09:30 — 10:00 HÜL 186
Liquid Crystals in Microgravity
•Ralf Stannarius

DY 63.1 09:30 — 10:00 ZEU 160
Influence of network topology on spreading of epileptic seizure
•Simona Olmi, Spase Petkoski, Fabrice Bartolomei, Maxime Guye, Viktor Jirsa

DY 63.2 10:00 — 10:30 ZEU 160
Chimera patterns induced by complex connectivity in Leaky Integrate-and-Fire Networks
•Astero Provata, Nefeli Tsigkri-DeSmedt, Johanne Hizanidis, Philipp Hoevel, Eckehard Schoell

Sessions

DY 62 09:30 — 12:30 HÜL 186
Complex Fluids and Soft Matter II (joint DY/CPP)

DY 63 09:30 — 12:30 ZEU 160
Controlling Complex Networks in Nature and Engineering (Focus session, joint DY/SOE/BP)

DY 64 09:30 — 12:15 SCH A251
Physics of Parasites – Joint Focus Session (BP/DY) organised by Holger Stark

DY 65 10:00 — 12:30 ZEU 118
Glasses and Glass Transition (joint session DY/CPP/DF)

Semiconductor Physics Division (HL)

Invited Talk

HL 83.1 09:30 — 10:00 POT 51
New Frontiers in Quantum Matter Heterostructures
•Jochen Mannhart

Sessions

HL 81 09:30 — 11:30 HSZ 03
Transport: Spintronics, Spincalorics and Magnetotransport (jointly with DS, HL, MA)

HL 82 09:30 — 11:15 POT 81
Quantum Information Systems

HL 83 09:30 — 12:45 POT 51
Oxide Semiconductors (joined session with CPP, DS)

HL 84 09:30 — 12:45 POT 151
Heterostructures and Interfaces

HL 85 09:30 — 12:30 POT 251
Topological Insulators III (joined session with TT)

HL 86 09:30 — 12:45 POT 112
New Materials

HL 87 09:30 — 12:30 POT 06
Carbon: Diamond and others

HL 88 10:15 — 13:15 ZEU 255
Organic Electronics and Photovoltaics V: OPV

HL 89 10:30 — 13:00 HSZ 02
Frontiers of Electronic-Structure Theory: New Concepts and Developments in Density Functional Theory and Beyond

HL 90 11:30 — 13:00 POT 81
Inhomogeneous Materials for Solar Cells

Magnetism Division (MA)

Sessions

MA 58 09:30 — 11:30 HSZ 03
Transport: Spintronics, Spincalorics and Magnetotransport (jointly with DS, HL, MA)

MA 59 09:30 — 11:30 HSZ 04
Topological Insulators II (jointly with DS, HL, O, TT)

MA 60 09:30 — 12:00 HSZ 101
Magnetic Materials: Applications and Multielement Bulk Materials

MA 61 09:30 — 11:30 HSZ 401
Skyrmion Dynamics

MA 62 09:30 — 11:45 HSZ 403
Magnetic Imaging (Experimental Techniques)

MA 63 09:30 — 12:30 POT 251
Topological Insulators III
(joined session with TT)

MA 64 09:30 — 13:00 P2-EG
Poster 1

MA 65 09:30 — 13:00 P2-OG1
Poster 2

MA 66 09:30 — 13:00 P2-OG2
Poster 3

MA 67 09:30 — 13:00 P2-OG3
Poster 4

MA 68 09:30 — 13:00 P2-OG4
Poster 5

MA 69 10:30 — 13:00 HSZ 02
Frontiers of Electronic-Structure Theory: New Concepts and Developments in Density Functional Theory and Beyond

Metal and Material Physics Division (MM)

Session

MM 71 10:30 — 13:00 HSZ 02
Frontiers of Electronic-Structure Theory: New Concepts and Developments in Density Functional Theory and Beyond

Surface Science Division (O)

Invited Talks

O 105.1 09:30 — 10:15 TRE Phy
The Surface Chemistry of Anatase (001) and Rutile (110) in Solution: Atomically Flat Surfaces and Near-Ideal Organic Monolayers
•Melissa Hines

O 109.1 10:30 — 11:00 WIL A317
Discovery of 1D spin-polarized states at step edges of topological crystalline insulators
•Paolo Sessi

O 110.1 10:30 — 11:00 GER 38
Ceramics for Metal-Organic Frameworks (MOFs) based devices
•Paolo Falcaro

O 112.1 13:15 — 14:00 HSZ 01
Helical Molecules and Surfaces: Self-Assembly, Spin Filtering and Unidirectional Motors
•Karl-Heinz Ernst

Sessions

O 105 09:30 — 10:15 TRE Phy
Overview Talk: Melissa Hines

O 106 10:30 — 13:00 WIL C107
Electronic Structure of Surfaces: Spectroscopy, Surface States III

O 107 10:30 — 13:00 TRE Phy
Heterogeneous Catalysis: Theory II

O 108 10:30 — 13:00 TRE Ma
Graphene: Adsorption, Intercalation and Other Aspects

O 109 10:30 — 13:00 WIL A317
Tribology and Structure of Surfaces: Misc.

O 110 10:30 — 13:00 GER 38
Molecular Films: Morphology, Electronics, Photovoltaics

O 111 10:30 — 13:00 REC/PHY C213
Nanostructures at Surfaces: Molecular Systems III

O 112 13:15 — 14:00 HSZ 01
Overview Talk STM and Molecular Machines: Karl-Heinz Ernst

O 113 10:15 — 13:00 ZEU 114
Thin Films, Nanostructures and Nanoparticles II

Physics of Socio-economic Systems Division (SOE)

Session

SOE 22 09:30 — 12:30 ZEU 160
Focus Session: Controlling Complex Networks in Nature and Engineering (joint DY /SOE /BP)

Low Temperature Physics Division (TT)

Sessions

TT 79 09:30 — 11:30 HSZ 03
Transport: Spintronics, Spincalorics and Magnetotransport (jointly with DS, HL, MA)

TT 80 09:30 — 11:00 HSZ 103
Low-Dimensional Systems: Oxide Hetero-Interfaces

TT 81 09:30 — 10:30 HSZ 304
Correlated Electrons: Chiral Magnets

TT 82 09:30 — 11:15 POT 81
Quantum Information Systems (joint session HL, MA, TT, organised by HL)

TT 83 09:30 — 12:30 POT 251
Topological Insulators III (joint session DS, HL, MA, O, TT, organised by HL)

TT 84 10:30 — 13:00 HSZ 02
SYES: Frontiers of Electronic-Structure Theory: New Concepts and Developments in Density Functional Theory and Beyond (joint symposium DS, HL, MA, MM, O, TT, organised by O)

TT 85 10:30 — 13:00 TRE Ma
Graphene: Adsorption, Intercalation and Other Aspects (joint session DY, DS, HL, MA, O, TT, organised by O)

TT 86 11:15 — 12:00 HSZ 103
Low-Dimensional Systems: Charge Order

TT 87 11:15 — 12:15 CHE 89
Optics and Light-Matter Interaction with Excitons in 2D Materials (joint session HL, DS, O, and TT, organised by DS)

Physik-LehrerInnen-Tage (LT)

Invited Talks, Workshops

LT 2.1 09:00 — 10:00 HSZ 301
Grundkonzepte der Allgemeinen Relativitätstheorie
•Ute Kraus

LT 2.2 10:00 — 10:45 HSZ 301
Quantenkryptographie – ein möglicher Zugang zur Quantenphysik für die Schule
•Gesche Pospiech

LT 2.3 11:00 — 11:30 HSZ 301
Sand im Kopf: Physik eines unterschätzten Systems
•Jörg Mertins

LT 3.1 11:45 — 12:30 HSZ 301
Digitale Photographie – Ein Blick hinter die Kulissen
•Steffen Danzenbächer

LT 3.2 12:30 — 13:15 HSZ 301
Tumortherapie mit Partikelstrahlen
•Wolfgang Enghardt

LT 4.1 14:15 — 17:15 HSZ 201
Physik und Philosophie in der Schule: von- und miteinander Lernen im Fach- und fächerverbindenden Unterricht
•Irena Doicescu

LT 5.1 14:15 — 17:15 HSZ 301
Mathe im Physikunterricht – Was stelle ich dar?
•Marie-Annette Geyer, Wiebke Kuske-Janßen

LT 6.1 14:15 — 17:15 WIL B221
Experimente mit kosmischen Teilchen im Unterricht
•Birgit Schneider

LT 7.1 14:15 — 17:15 Albertinum
Physik im Kunstmuseum
•Thomas Prestel, Wiebke Kuske-Janßen

Sessions

LT 2 09:00 — 11:30 HSZ 301
Moderne Physik für den Physikunterricht

LT 3 11:45 — 13:15 HSZ 301
Moderne Technologie für den Physikunterricht

LT 4 14:15 — 17:15 HSZ 201
Physik und Philosophie

LT 5 14:15 — 17:15 HSZ 301
Physik und Mathematik

LT 6 14:15 — 17:15 WIL B221
Astrophysikalische Experimente

LT 7 14:15 — 17:15 Albertinum
Physik und Kunst

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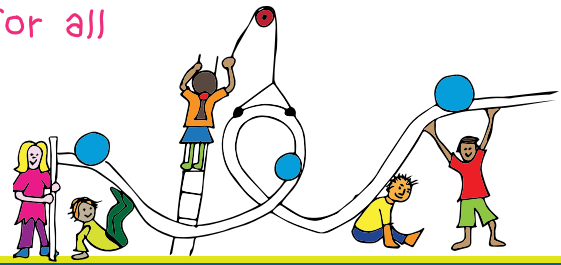

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Index of Exhibitors Dresden 2017

Location: Technical University Dresden, Bergstraße 64, 01069 Dresden

Opening Hours Exhibition: Tuesday - Thursday 9:00 - 17:00

Company	Location	Stand-No.
Accurion GmbH Stresemannstraße 30, 37079 Göttingen *Anti Vibration Isolation Systems*	Foyer HSZ	H 19
ADDITIVE Soft- und Hardware für Technik und Wissenschaft GmbH Max-Planck-Straße 22 b, 61381 Friedrichsdorf *ADDITIVE steht für Berechnen, Visualisieren, Automatisieren für Statistik und Wissensmanagement im Qualitäts-/Ingenieurwesen mit den Produkten Minitab, Origin, Mathematica und ADDITIVE-Cloud-Services.*	Tent A	A 97
Agilent Technologies Sales & Services GmbH & Co. KG Lyoner Straße 20, 60528 Frankfurt/M. *Vakuumpumpen, Vakuummessgeräte, Lecksucher*	Tent A	A 11
Allectra GmbH Traubeneichenstraße 62-66, 16567 Schönfließ *Vakuumkomponenten, el. Durchführungen, Kabel*	Tent A	A 79
AMETEK GmbH Rudolf-Diesel-Straße 16, 40670 Meerbusch *SunPower: Free-Piston Stirling Engines and Cryocoolers*	Tent A	A 17

AMETEK GmbH Tent A A 20

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Vaqtec-scientific Mario Melzer Tent A A 58

Thulestraße 18B, 13189 Berlin

Komponenten der UHV- und HV-Technik: u.a. Stromdurchführungen, Schaugläser, Schichtdicken-Messgeräte

Walter de Gruyter GmbH Foyer HSZ H 18

Genthiner Straße 13, 10785 Berlin

Wissenschaftliche Bücher und Zeitschriften

Wiley-VCH Verlag GmbH & Co. KG aA Foyer HSZ H 21

Boschstraße 12, 69469 Weinheim

Wiley is a global provider of knowledge and knowledge-enabled services that improve outcomes in areas of research, professional practice and education. Through the Research segment, the Company provides digital and print scientific, technical, medical, and scholarly journals, reference works, books, database services, and advertising

WITec GmbH
Wissenschaftliche Instrumente Tent A A 12

Lise-Meitner-Straße 6, 89081 Ulm

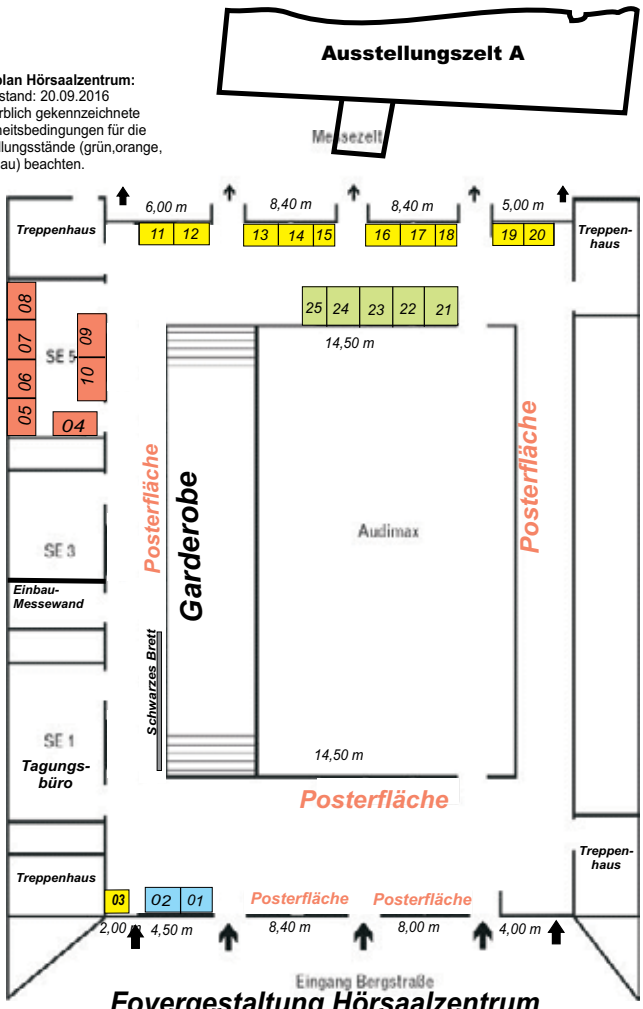
Hochauflösende Mikroskope: AFM, Raman, SNOM

Zurich Instruments AG
Marketing and Sales Tent A A 100

Technoparkstraße 1, 8005 Zurich, Switzerland

Lock-in amplifiers, phase-locked loops, arbitrary waveform generator, impedance analyzers, digitizers, boxcar averagers

Standplan Hörsaalzentrum:
Arbeitsstand: 20.09.2016
Bitte farblich gekennzeichnete Sicherheitsbedingungen für die Ausstellungsstände (grün,orange, gelb, blau) beachten.



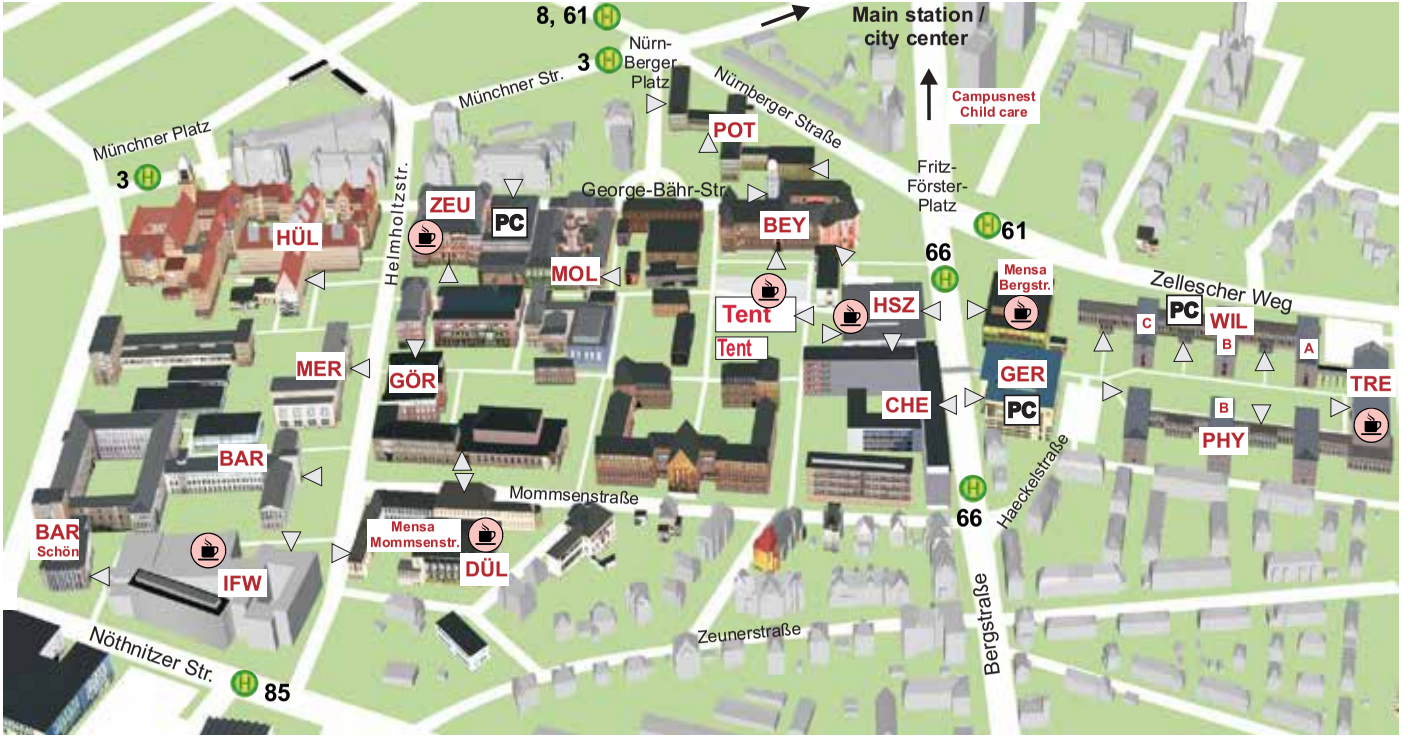
Foyergestaltung Hörsaalzentrum

Im gesamten Foyer BS-Überwachung während der Veranstaltung

Legende:

- Standtiefe 3,00 m - kein E-Anschluss ,
- Standtiefe 2,00 m - kein E-Anschluss
- **Standtiefe 2,**00 m E-Anschluss 230 V, (E-Zuführung über Schukoanschlüsse)
- Standtiefe 2,50 m - kein E-Anschluss

Standaufteilung Zelt A


8, 61
3
Nürn-
Berger
Platz
Münchner Str.
Nürnberger Straße
Main station /
city center
Campusnest
Child care
Münchner Platz
3
POT
George-Bähr-Str.
Fritz-
Förster-
Platz
61
66
ZEU
PC
BEY
HÜL
Helmholtzstr.
MOL
Tent
Tent
HSZ
Mensa
Bergstr.
Zellescher Weg
PC
WIL
C
B
A
MER
GÖR
GER
PC
CHE
TRE
B
PHY
BAR
Mommsenstraße
66
Haeckelstraße
BAR
Schön
Mensa
Mommsenstr.
DÜL
IFW
Zeunerstraße
Bergstraße
Nöthnitzer Str.
85

Tram or bus stop with number

Mensa, Snacks, Coffee

PC-Pool (Wlan provided allover campus)

HSZ Lecture hall name (abbreviation)

Entrance

BAR	Barkhausen-Bau	
BAR Schön	Schönfeldhörsaal	
BEY	Beyer-Bau	
CHE	Chemiegebäude	Poster P3
DÜL	Dülfersaal	
GER	von-Gerber-Bau	
GÖR	Görges-Bau	
HSZ	**Hörsaalzentrum *(lecture hall center)***	Conference office /Plenary talks / Symposia / Poster P2 / Tutorials / Einstein Slam / Evening talk / Job Market / Exhibition
HÜL	Hülsse-Bau	
IFW	Leibniz-Institut (IFW)	Poster P4
MER	Merkel-Bau	
MOL	Molier-Bau	
PHY	Physikgebäude	
POT	Gerhart-Potthoff-Bau	
TRE	Trefftz-Bau	
Tents		Poster P1 & Exhibition
WIL	Willers-Bau	
ZEU	Zeuner-Bau	

DPG Schüler Tagung

Physikzentrum Bad Honnef

8. - 10. September

Physik im Kopf?

Mitdiskutieren!

***Anmeldung:* 17. April bis 4. Juni**

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