



**MPIE Workshop “Interface Design in Solar Cells” (02.07.2013)**

**PROGRAM**

- 08:40-09:00 **Welcome**  
Coffee and Cookies
- 09:00 – 09:15 **Opening**  
Prof. Dr. Dierk Raabe (MPIE)
- 09:15 – 09:35 **Role of impurities in CIGS solar cells**  
Dr. Roland Würz (ZSW)
- 09:35 – 09:55 **Atomistic modeling in CIGS solar cells**  
Prof. Dr. Karsten Albe (Darmstadt University)
- 09:55 – 10:15 **Comprehensive, 5-parameter crystallographic GB characterization**  
Dr. Peter Konijnenberg, Guillaume Stechmann, Dr. Stefan Zaefferer (MPIE)
- 10:15-10:45 **– Coffee break –**
- 10:45 – 11:05 **Extended structural defects in CIGS solar cells**  
Dr. Daniel Abou-Ras (HZB)
- 11:05 – 11:25 **Study of internal interfaces in CIGS solar cells by APT**  
Dr. Oana Cojocaru-Mirédin (MPIE)
- 11:25 – 11:45 **Cd-free ILGAR buffer layers: material tuning for high solar cell performance**  
Prof. Dr. Christian-Herbert Fischer (HZB)
- 11:45 – 12:45 **– Lunch break –**
- 12:45 – 13:05 **Solar cells based on Cu-rich CuInSe<sub>2</sub> absorbers**  
Prof. Dr. Susanne Siebentritt (Luxemburg University)
- 13:05 – 13:25 **Recombination activity in mc-Si solar cells**  
Dr. Otwin Breitenstein (MPI Halle)
- 13:25 – 13:45 **Correlative analysis of grain boundaries in m-Si solar cells**  
Andreas Stoffers (MPIE)
- 13:45 – 14:15 **– Coffee break –**

14:15 – 14:35 **HRTEM characterization of Si-based multi-quantum-well solar cells**

Prof. Dr. Joachim Mayer (RWTH Aachen University)

14:35 – 14:55 **EBIC investigations of defect recombination activity in solar Si**

Dr. Winfried Seifert (Joint Lab IHP/BTU)

14:55 – 15:15

**APT Study of CZTS thin-films**

Torsten Schwarz (MPIE)

15:15 – 15:45

**Discussion & Coffee Break**

15:45-17:00

**IDSC lab sessions**

Lab Session 1	Lab Session 2	Lab Session 3	Lab Session 4
<b>Segregation at internal interfaces using APT</b> Dr. P. Choi	<b>DFT calculations</b> Dr. C. Freysoldt	<b>UHV Cluster</b> Dr. F. Renner	<b>Imaging the GBs using EBSD</b> Dr. P. Konijnenberg

17:00-18:00

**Beer & Pretzels**

**Address:** Max-Planck-Institut für Eisenforschung, Max-Planck-Straße 1, 40237 Düsseldorf  
(for arrival instructions please refer to [www.mpie.de](http://www.mpie.de))

**Registration:** Please register via [idsc13.mpie.de](http://idsc13.mpie.de) website **before 15<sup>th</sup> June 2013.**