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22.05.2025
http://idw-online.de/de/news852625

Forschungsprojekte
Chemie, Elektrotechnik, Physik / Astronomie, Werkstoffwissenschaften
überregional

Excellence Strategy: University of Halle receives funding for a Cluster of Excellence for the first time

The Martin Luther University Halle-Wittenberg (MLU) is one of the winners of the Excellence Strategy. MLU applied for the Cluster of Excellence "Center for Chiral Electronics" (CCE) together with the Freie Universität Berlin, the University of Regensburg and the Max Planck Institute of Microstructure Physics in Halle. The Cluster of Excellence will receive up to 64.5 million euros in funding from the German Research Foundation (DFG) and will start in January 2026. It will initially run for seven years. Research will focus on new concepts for high-performance and energy-efficient electronics.

"The selection of the Center for Chiral Electronics is an outstanding achievement for Martin Luther University as well as for the state of Saxony-Anhalt. This initiative will foster cutting edge research in materials science. We have been increasing our focus on this core research area in recent years, an investment that is now rewarded by our success in the Excellence Strategy. Furthermore, the university as a whole will also benefit from the funding and be able to boost its reputation as an internationally recognised research institution. We thank all those involved who have made this success possible," says MLU's Rector, Professor Claudia Becker.

"It's official! Saxony-Anhalt's scientific landscape has finally received the accolade of 'excellent'", declares Science Minister, Professor Armin Willingmann. "The University of Halle's success in the current round of the Excellence Strategy is a compelling signal - for the entire federal state as well. We can look forward to important impulses for research in the state as well as greater attention in terms of the international recognition of science in Eastern Germany. The consistent and long-term support from the Ministry of Science has therefore paid off. As of today, one thing is clear: Saxony-Anhalt can also achieve excellence."

"The funding from the Excellence Strategy is a fantastic achievement. The panel of experts have recognised the outstanding scientific quality of our initiative. We have a unique opportunity to break new ground in solid-state physics and lay the foundations for the next generation of electronics and memory technologies," explains spokesperson Professor Georg Woltersdorf from MLU. He submitted the proposal for the Cluster of Excellence together with Professor Katharina Franke from the Freie Universität Berlin and Professor Christoph Strunk from the University of Regensburg.

The "Center for Chiral Electronics" is a joint initiative of the MLU, the Freie Universität Berlin, the University of Regensburg and the Max Planck Institute of Microstructure Physics (MPI) in Halle. CCE will develop new concepts for energy-efficient electronics that are based on chirality. Chirality is a key property and ubiquitous in nature. It means that an object cannot be superimposed on its mirror image through rotation and translation. This property gives many objects an intrinsic stability. Surprisingly, until now, chirality is not used at all in electronics. The CCE team aims to develop new chiral materials and concepts for ultrafast and efficient electronics. The involved locations of CCE complement each other ideally by contributing their own research focus: Halle with the expertise in chiral materials, Berlin with focus on ultrafast spin dynamics, and Regensburg with specialization on coherent strong-field control.

CCE will train highly qualified physicists who will make important technological contributions to semiconductor technology. This is highly relevant in the context of the European Chips Act, which aims to strengthen the EU's semiconductor ecosystem, increase its resilience, and reduce external dependencies. In parallel to the core research program CCE will collaborate with educational researchers aims to inspire more young people to get involved in science while they are still at school - thereby potentially attracting them to a career in research and development.

Further information on the "Center for Chiral Electronics": https://www.chiralelectronics.de/
Further information on the Excellence Strategy: https://www.exzellenzstrategie.de/