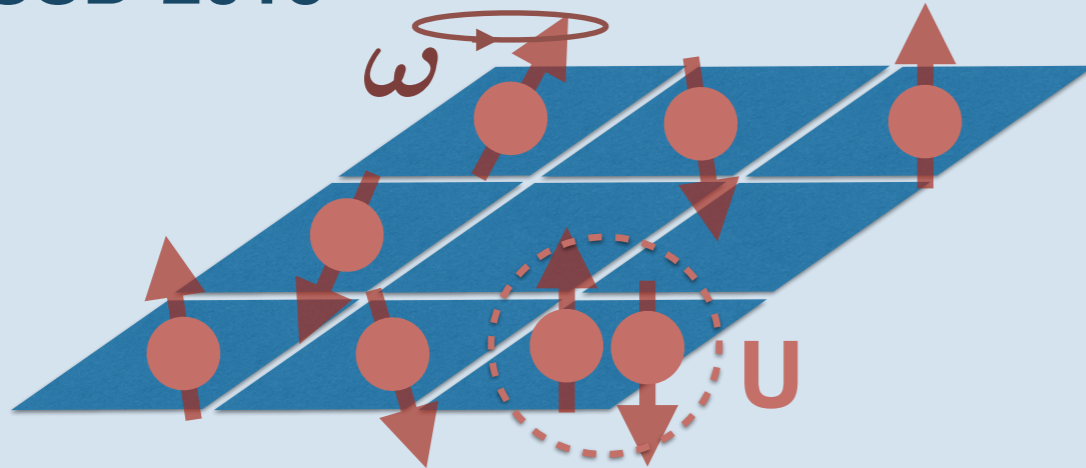


# Workshop on Correlated Electronic Structure and Spin Dynamics

## CESSD-2015



Relations between strong correlations in the electronic structure of solids and the real-time dynamics of local spins are yet largely unexplored but fundamental for an understanding of time-dependent phenomena in novel magnetic materials.

This workshop comprises a broad range of topics in this interdisciplinary field, such as

- the formation of local magnetic moments as a signature of electron correlations,
- effects of strong Coulomb interaction on the characteristics of spin excitations,
- signatures of spin excitations in the spectral function of magnetic materials,
- different time scales in the real-time dynamics of electrons and spins,
- the feedback of spin-dynamics on the time-dependent electronic structure.

Novel theoretical and experimental techniques will be discussed as well as topical physical problems and promising routes providing new fundamental insights.

**Hamburg, May 6 - May 7, 2015**

### Speakers:

Frithjof Anders (Technische Universität Dortmund)  
Stefan Blügel (Forschungszentrum Jülich)  
Uwe Bowensiepen (Universität Duisburg-Essen)  
Olle Eriksson (Uppsala University)  
Leonid Glazman (Yale University)  
Mikhail Katsnelson (Radboud University of Nijmegen)  
Stefan Kehrein (Georg-August-Universität Göttingen)  
Klaus Kern (MPI Stuttgart)  
Peter Kopietz (J.W.Goethe-Universität Frankfurt)  
Yigal Meir (Ben Gurion University)  
Sander Otte (Delft University of Technology)  
Thomas Pruschke (Georg-August-Universität Göttingen)  
Alexey Rubtsov (Moscow State University)  
Jürgen Schnack (University of Bielefeld)  
Dieter Vollhardt (Universität Augsburg)  
Philipp Werner (University of Fribourg)

### Organizers:

Martin Eckstein (Center for Free-Electron Laser Science)  
Frank Lechermann (Hamburg University)  
Alexander Lichtenstein (Hamburg University)  
Michael Potthoff (Hamburg University)  
Klaus Sengstock (Hamburg University)  
Roland Wiesendanger (Hamburg University)

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