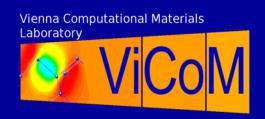
From Electrons to Phase Transitions 2018

April, 4th to 6th 2018, Vienna

A ViCoM Conference Georg Kresse (University of Vienna) Karsten Held (Vienna University of Technology)



From Electrons to Phase Transitions is an international conference organized within the framework of the Special Research Area "SFB ViCoM" (funded by the Austrian Science Fund – FWF; Spokesperson: Georg Kresse, Vice-Spokesperson: Karsten Held).

SCOPE OF THE CONFERENCE

The description of phase transitions is among the most challenging tasks in solid state physics. From an electronic point of view, an accurate description of phase transitions requires highly accurate energy differences between competing phases, a goal that is not yet achievable using routine ab initio methods. The conference will give an overview of methods beyond DFT that show promise in this area. The description of the ionic degrees of freedom is equally compelling, often necessitating sophisticated sampling methods to accurately capture the entropic contributions and their changes along the transition pathway. The conference will highlight promising new developments in this area, as well as, technologically relevant applications.

ABSTRACT SUBMISSION

Abstracts may be sent for oral or poster presentations via the online registration form on sfb-vicom.at until Feb 16th 2018. Ten contributed talks will be selected from the submissions.

VENUE/SCHEDULE

From Electrons to Phase Transitions takes place at "Christian Doppler lecture hall" in the historical building Boltzmanngasse 5 in Vienna's 9th district. Lectures start Wednesday at 10 am and end Friday at 1 pm.

FEE

The conference fee is 150 Euro for registration before March 4th and 200 Euro afterwards (includes coffee breaks and conference dinner).

(PRELIMINARY) LIST OF SPEAKERS Peter Blaha, Vienna University of Technology

Christoph Dellago, University of Vienna Martin Eckstein, Friedrich-Alexander University Erlangen-Nürnberg, Germany Karsten Held, Vienna University of Technology Carsten Honerkamp, RWTH Aachen University, Germany Georg Kresse, University of Vienna Christos Likos, University of Vienna Walter Metzner, Max Planck Institute for Solid State Research Stuttgart, Germany Jörg Neugebauer, Max Planck Institute for Iron Research Düsseldorf, Germany Ulrich Nowak, University of Konstanz, Germany Ignacio Pagonabarraga, University of Barcelona, Spain Michele Parrinello, ETH Zurich, Switzerland Maria Clelia Righi, University of Modena and Reggio Emilia, Italy Dieter Suess, University of Vienna Tim Wehling, University of Bremen, Germany