

From Electrons to Phase Transitions

February, 26th to 28th 2014, Vienna

A ViCoM Conference

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Vienna Computational Materials
Laboratory



VIENNA COMPUTATIONAL MATERIALS LABORATORY
A SPECIAL RESEARCH AREA FUNDED BY THE AUSTRIAN SCIENCE FUND (FWF)
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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 Dec 1st 2013.

VENUE/SCHEDULE

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

FEE

The conference fee is 150 Euro for registration before Dec 1st and 200 Euro afterwards (includes coffee breaks and conference dinner).

INVITED SPEAKERS

Markus Aichhorn, Graz University of Technology
Sabine Andergassen, University of Vienna
Fakher F. Assaad, University of Würzburg
Garnet Chan, Princeton University
Roy Chantrell, University of York
Ulrike Diebold, Vienna University of Technology
Olle Eriksson, Uppsala University
Hardy Gross, Max-Planck-Institut Halle
Andreas Grüneis, University of Vienna
Ferenc Karsai, Vienna University of Technology
Florian Libisch, Vienna University of Technology
Claudine Noguera, Institut des Nanosciences de Paris

Athanassios Z. Panagiotopoulos, Princeton University
Ulf R. Pederson, Vienna University of Technology
Lode Pollet, University of Munich
Lucia Reining, École Polytechnique Palaiseau cedex
Anders W. Sandvik, Boston University
Friedericke Schmid, University of Mainz
David J. Singh, Oak Ridge National Laboratory
Frédéric Soisson, CEA
Alessandro Toschi, Vienna University of Technology
Pieter Visscher, University of Alabama
Weitao Yang, Duke University