

# Programme



## 27. Workshop

on

**Novel materials and superconductivity**

### PLANNERALM

11. - 18. Feb. 2012

*Sponsored by TU Wien*

<b>Location:</b>	<b>Planneralm</b> , Ennstal (Steiermark) A-8953 <b>Donnersbach</b>
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<b>Date:</b>	Arrival: Saturday, February 11, 2012
	Departure: Saturday, February 18, 2012

Chairman: **Univ.Prof. Karlheinz Schwarz**  
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#### Programme committee:

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World Wide Web: [www.wien2k.at/theochem/planneralm/](http://www.wien2k.at/theochem/planneralm/)

## Evening sessions

Sunday, Feb.12, 2012 (Chair: R.Hackl)

- 19:00 Helge Rosner (MPI CPfS Dresden, Germany):  
*New perspectives of quantum magnets:  
A joint theoretical and experimental study*
- 19:30 Xavier Rocquefelte (CNRS Nantes, France):  
*Modelling of organic-inorganic hybrid materials*
- 19:40 ~~20:00~~ Hermann Kronberger (TU Wien):  
*Mechanistic aspects of surface structuring via electrodeposition*

Monday, Feb.13, 2012 (Chair: K. Held)

- 19:00 Johannes Ferber (Univ. Frankfurt a Main, Germany):  
*Effects of correlation in an LDA+DMFT framework:  
The iron pnictides LiFeAs and LiFeP*
- 19:30 Markus Aichhorn (TU Graz, Austria):  
*From 3d to 4d to 5d: Surprising behavior of transition metal oxides*
- 20:00 Andrei Pimenov (TU Wien):  
*Terahertz properties of the Fe(SeTe) superconductor*

Tuesday, Feb.14, 2012 (Chair: A. Pimenov)

- 19:00 Philip Hansmann (TU Wien):  
*Adatom systems on the silicon 111-surface: Mott or not ?*
- 19:40 Wolfgang Lang (Univ. Wien, Austria):  
*Vortex motion in YBCO with intrinsic and artificial order modulations*

Wednesday, Feb15, 2012 (Chair: P. Blaha)

- 19:00 **Micro Poster Presentation:**  
*Each poster can be briefly presented in 3 minutes  
PowerPoint presentations need to be arranged with the organizer.*
- 19:30 **POSTER SESSION**

Thursday, Feb.16, 2012 (Chair: X Rocquefelte)

- 19:00 Karsten Held (TU Wien):  
*LDA+DMFT: From bulk to nanostructures*
- 19:30 Peter Weinberger (TU Wien):  
*Spin transitions above room temperature  
A synthetic breakthrough in tetrazole ligand synthesis*
- 20:00 Mohammad Rezek (Palestine Techn. Univ):  
*Electronic structure and phase transition in  $Sc_xAl_{1-x}N$  alloys*

Friday, Feb.17, 2012 (Chair: H. Rosner)

- 19:00 Aliaksei Charnukha (MPI Stuttgart, Germany):  
*Optical conductivity of 122 iron pnictides*
- 19:40 Elias Assmann (TU Wien):  
*Bulk and interface properties of Lanthanum vanadate*

$BqFe_2As_2$  parent compounds = AF  
doping K (holes), Co (electron)

SrTiO<sub>3</sub> /  
LaVO<sub>3</sub>

## Posters

- Johannes **Bintinger**, E.Horkel (TU Wien)  
*Stericallytuned triarylaminines and oligothiophene derivatives as building blocks for novel organic electronic materials: synthesis and characterization*
- Tzvetanka **Boiadjieva**, H.Kronberger, T.Szeck, M.Monev, T.Lavric (CEST, Wr.Neustadt)  
*Novel Zn-alloy: Alloy deposition for corrosion protection in stage of industrial trials*
- Hans-Martin **Eiter**, M.Lavagnini, R.Roßner, R.Hackl, E.A.Nowadnick, A.F.Kemper, T.P.Devereaux, J.-H.Chu, J.G.Analytis, I.R.Fisher (WMI, Garching, Germany),  
*High pressure study of charge density waves in  $ErTe_3$*
- Jürgen **Fleig**, T.Tröml (TU Wien)  
*Ion transport in lead zirconate titanate*
- Jakob **Kanter**, P.Moll, F.Ronning, E.Bauer, B.Batlogg (ETH Zürich, Switzerland)  
*Electric transport measurements on micro-structured  $CePt_2In_7$  single crystals in a diamond anvil cell*
- F.Kretzschmar, A.Baum, B.Muschler, Rudi **Hackl**, J.-H.Chu, J.Analytis, I.R.Fisher (Walther-Meissner-Institut, Garching, Germany)  
*Pairing in FeAs systems*
- Christian **Knoll**, D. Müller, P.Weinberger, B.Stöger (TU Wien)  
*New tetrazole compounds as asymmetric ligands for mixed iron(II) lanthanide complexes*
- Stefan **Lebernegg**, M.Schmitt, O.Janson, A.Tsirlin, H.Rosner (MPI CPfS Dresden, Germany)  
*Magnetism of  $Cu(2+)$  chain-compounds - how covalency matters*
- G.Tondi, A.Petutschningg, M.Demker, Maurizio **Musso** (Univ.Salzburg)  
*Tannin based organic foams and their characterization by Raman spectroscopy*
- Anna **Pimenov**, Ch.Kant, V.Tsurkan, A.Loidl, L.Svistov, A.Pimenov (TU Wien)  
*Synthesis and magnetic dynamics of multiferroic chromates*
- Franz **Renz**, G.Vanko, P.Homenya, R.Sadaat, N.Zoltan, S.Houtari (Univ.Hannover)  
*Hard x-ray induced thermal hysteresis*
- F.Renz, G.Vanko, P.Homenya, R.Sadaat, N.Zoltan, Yakup **Baran** (Univ.Hannover)  
*Hard x-ray induced excited spin state trapping*
- F.Renz, G.Vanko, P.**Homenya**, R.Sadaat, N.Zoltan, S.Houtari (Univ.Hannover)  
*Strong field hard x-ray induced excited spin state trapping*
- N.Hassan, Julia **Stelzl**, P.Weinberger, G.Molnar, A.Bousseksou, F.Kubel, K.Mereiter, R.Boca, W.Linert (TU Wien)  
*Spectroscopic, structural and magnetic investigations of iron(II) complexes based on 1-isopropyl- and 1-isobutyl-substituted tetrazole ligands*
- Julia **Weber**, F.Shahzad, K.Nadeem, H.Krenn, P.Knoll, K.Ettinger, I.Letofsky-Papst (Univ.Graz)  
*Magnetic properties of NiO nano-particles*