## **NRS/IXS Workshop for PETRA III**

## Monday, 10.09.2007

Registration 11:00 FLASH Seminar Room (Bldg. 28c) **Plenary Session: Techniques Overview** FLASH Seminar Room (Bldg. 28c) 13:00 R. Röhlsberger Introduction to PETRA III 13:20 H. Franz **Beamline Overview** R. Rüffer 13:40 Nuclear Resonant Scattering at the ESRF 14:10 M. Krisch Inelastic X-ray Scattering from Phonons: The ESRF Perspective Coffeebreak 14:40 15:00 W. Sturhahn Nuclear Resonant Scattering at APS A. Q. R. Baron 15:30 Inelastic X-Ray Scattering at SPring8 16:00 U. Bergmann Inelastic X-ray Scattering and Advanced Spectroscopy with eV Resolution Coffeebreak + Poster Session 16:30 17:30 **Round-table discussion Dinner at the DESY Bistro** 19:00

Tuesday, 11.09.2007

	Parallel Session: Nuclear Resonant Scattering	Parallel Session: Inelastic X-ray Scattering
	Room 456, Bldg. 25f	Room 109, Bldg. 25b
09:00	V. Schünemann Nuclear Resonant Scattering in Life Sciences	P. Glatzel Chemical Applications of X-Ray Emission Spectroscopy
09:30	J. Korecki Surface Physics with Nuclear Resonant Scattering	I. Loa Lattice Dyn. and Electronic Excit.in Complex Metals at Extreme Conditions
10:00	Coffeebreak	Coffeebreak
10:30	<b>T. Asthalter</b> What can Nuclear Resonant Scattering Teach us about Molecular Dynamics and Catalysis - some Results and Perspectives	WCh. Pilgrim High-Temperature and High-Pessure IXS on Liquids and Melts
11:00	L. Dubrovinsky Iron Spin State in Earth Mantle: Insight From Combined NFS and Mössbauer Spectroscopy Studies	H. Reichert Inelastic X-Ray Scattering in Confined Geometries
11:30	Lunch	Lunch
13:00	M. Abd-Elmeguid High Pressure Studies of Strongly Correlated Systems Using NRS	<b>Ch. Sternemann</b> Core-Shell Excitations Studied by Non-Resonant Inelastic X-ray Scattering
13:30	J. Eisenmenger Geometrical Constraints in Exchange Biased and SC Films	J. Geck RIXS: A new probe for many body effects in correlated electron systems
14:00	Coffeebreak	Coffeebreak
14:30	E. Bill High-Valent Iron Complexes - A Step Ahead of Nature ?	<b>M. Wilke</b> Applications of IXS for Studying Properties of Geo-Materials
15:00	<b>F. Tuczek</b> Monomolecular Layers from Transition Metal Complexes: Applications in Catalysis and Molecular Electronics	A. Soininen Electronic Excitations: First-principles Modeling
15:30	Coffeebreak	Coffeebreak
15:45	Discussion of user demands	Discussion of user demands
17:00	Plenary Session (FLASH Seminar room, Bldg. 28c)	

## Monday, 10.11.07, 16:30-17:30, FLASH Seminar room, Bldg. 28c

Title **Poster presenter** Spin- and phase transition in the spin crossover complex [Fe(ptz)6] (BF4)2 studied by Böttger, nuclear inelastic scattering of synchrotron radiation and by DFT calculations 1 Lars 2 van Bürck, **SRPAC: Basic Features and First Applications** Uwe The Magnetic superstructure of iron/iron oxide superlattices unraveled by Nuclear Resonant Couet. Scattering 3 Sebastien Murphy, Bridget Poster 1) Investigating surface dynamics with inelastic X-ray scattering 4 Bridget Murphy, Herwig Requardt, Jochim Stettner, Jorge Serrano, Michael Krisch, Martin Müller. Werner Press Poster 2) Anisotropy of the elastic properties of cellulose fibres investigated using IXS Imke Diddens, Bridget Murphy, Michael Krisch, Martin Müller Iron behavior in perovskite: a high pressure Moessbauer study Narygina, Olga 4 6 Paulsen, Hauke DFT calculation and NIS measurements on iron sulfur proteins Implementation of a first principles approach to the prediction and analysis of NRVS spectra within the ORCA quantum chemistry package 7 Petrenko, Taras 8 Planckaert, Nikie Energy Resolved Nuclear Resonant Magnetometry An overview of the GALAXIES beamline at SOLEIL: Inelastic x-ray scattering and Electron Rueff, Jean-Pascal 9 spectroscopy The start of ferromagnetism in ultra thin epitaxial 57Fe-films on GaAs(001)-(4x6) 10 Schuster, Ellen

**Poster Session** 

11	Soininen,	Juha Aleksi	Extraction of the local density of states from X-ray Raman scattering data
12	Strohm,	Cornelius	Nuclear forward scattering in pulsed high magnetic fields
13	Trautwein,	Alfred Xaver	Photo-induced metastable isonytrosyl structure of the nitroprusside anion confirmed by NIS measurements and DFT calculations
14	Vitova,	Tonya	Site-selective XANES study of iron-doped lithium niobate crystals
15	Wende,	Heiko	Magnetic ordering and switching of iron porphyrin molecules mediated by ferromagnetic films