

The 5th NAREGI International Nano-Science Symposium
Theories and Simulation Methods for Soft X-ray Solid State Spectroscopy
Time Table

Date	Time	Minutes	Title	Speaker
Nov. 7 (Mon.)	10:00-10:10	10	Welcome Greeting	Prof. K. Nasu (KEK-IMSS-PF, Tsukuba)
	Session 1		Theoretical Methods I (Chair: Prof. A. Kotani (KEK-IMSS-PF, Tsukuba))	
	10:10-10:50	40	Real-space Calculations of Optical Constants from UV to X-rays	Prof. J. J. Rehr (Univ. of Washington, Seattle, USA)
	10:50-11:30	40	ARPES Calculations for Highest Accuracy	Prof. W. Schattke (Christian-Albrechts-Univ., Kiel, Germany)
	11:30-12:00	30	Band Calculation for f-Electron Systems on the Basis of Dynamical Mean Field Theory	Prof. O. Sakai (Tokyo Metropolitan Univ.)
	12:00-13:30	90	Lunch	
	Session 2		Theoretical Methods II (Chair: Prof. O. Sakai (Tokyo Metropolitan Univ.))	
	13:30-14:00	30	How to Make Diamond from Graphite by X-ray Core Excitation	Prof. H. Katayama-Yoshida (ISIR, Osaka Univ.)
	14:00-14:30	30	Path-integral Theory on the Angle-Resolved Photoemission Spectra of the Interacting Electron Systems	Dr. N. Tomita (KEK-IMSS-PF, Tsukuba)
	Session 3		Soft X-ray Laser (Chair: Prof. Y. Nishihata (JAERI, Spring-8, Hyogo))	
	14:30-15:00	30	On the Double Hole X-ray Emission Spectroscopy	Prof. K. Namikawa (Tokyo Gakugei Univ.)
	15:00-15:20	20	Coffee Break	
	Session 4		XAS, XES and RPES (Chair: Prof. T. Jo (Hiroshima Univ.))	
	15:20-16:00	40	Quantum Chemical Approach to X-ray Spectroscopy: Application to Small Molecules and Surfaces	Prof. K. Hermann (FHI der MPG, Berlin, Germany)
	16:00-16:30	30	Theoretical and Experimental Investigations of Cu K α Resonant X-ray Emission Spectra for La ₂ CuO ₄ --- An Ultra-fine Probe for the Pre-edge Structure of Cu 1s Electron Excitation ---	Prof. A. Kotani (KEK-IMSS-PF, Tsukuba)
	16:30-17:00	30	Resonant X-ray Emission Spectra by the Electric Quadrupole Excitation at the Ni K-Edge of NiO	Prof. T. Iwazumi (KEK-IMSS-PF, Tsukuba)
	17:00-17:40	40	Biological X-ray Absorption Spectroscopy (BioXAS) a Modern Technique to Investigate the Structure-Function of Metalloproteins	Prof. Z. Y. Wu (BSRF, Beijing, China)
	18:00-20:40	160	Banquet (Restaurant 'Espoir')	
Nov. 8 (Tue.)	Session 5		Orbital and Magnetic Orders (Chair: Prof. T. Koide (KEK-IMSS-PF, Tsukuba))	
	9:00-9:40	40	Analysis of Resonant Soft X-ray Scattering Experiments and the Orbital and Magnetic Order in Manganites	Prof. M. Altarelli (ICTP, Trieste, Italy)
	9:40-10:20	40	Electronic Structures of Magnetic Materials	Prof. B. I. Min (POSTECH, Pohang, Korea)
	10:20-10:35	15	Coffee Break	
	10:35-11:15	40	Effect of Crystalline Field Splitting on Orbital Ordering in KCuF ₃ and its Manifestation in Resonant X-ray Scattering Spectra	Prof. L. J. Zou (ISSP, Anhui, China)
	11:15-11:45	30	4p States and X-ray Spectroscopy	Prof. J. Igarashi (Ibaraki Univ.)
	Session 6		ARPES, Electron-Phonon Coupling I (Chair: Prof. A. Fujimori (Univ. of Tokyo))	
	11:45-12:25	40	Spectral Evolution of Finite Dimensional Holstein Model	Prof. Z. Y. Zhu (SIAP, Shanghai, China)
	12:25-13:55	90	Lunch	
	13:55-14:35	40	ARPES of Two-dimensional Modulated Structures	Prof. M. Grioni (IPN, Lausanne, Switzerland)
	14:35-15:05	30	High-resolution Angle-Resolved Photoemission Study of the Electron-Phonon and Electron-Electron Interactions in Simple Metals	Prof. K. Shimada (HSRC, Hiroshima Univ.)
	Session 7		ARPES, Electron-Phonon Coupling II (Chair: Prof. K. Shimada (HSRC, Hiroshima Univ.))	
	15:05-15:45	40	Theory of Angle-Resolved Photoemission Spectra of the Many-Electron Frohlich Model	Prof. H. Zheng (Shanghai Jiao Tong Univ., China)
	15:45-16:00	15	Coffee Break	
	16:00-16:30	30	Ultrahigh-Resolution Photoemission Study of Superconductors Using Quasi-CW VUV Laser	Prof. S. Shin (ISSP, Univ. of Tokyo)
	16:30-17:00	30	Path-integral Theory for Photoemission Spectra of Electron-Phonon Coupled Systems and Anomalous Isotope Effect	Dr. J. Kai (KEK-IMSS-PF, Tsukuba)
	Session 8		Photo-induced Phase Transition (Chair: Prof. T. Iwazumi (KEK-IMSS-PF, Tsukuba))	
	17:00-17:30	30	Gigantic Increase of the Physical Properties on Metal Oxides by X-ray Core Level Excitations	Prof. Y. Nishihata (JAERI, Spring-8, Hyogo)
Nov. 9 (Wed.)	Session 9		XMCD and XLD (Chair: Prof. J. Igarashi (Ibaraki Univ.))	
	9:30-10:10	40	X-ray Magnetic Circular Dichroism at Rare-earth L _{2,3} Absorption Edges in Various Compounds and Alloys	Prof. J. C. Parlebas (IPCM/CNRS, Strasbourg, France)
	10:10-10:40	30	Angle-Resolved Longitudinal- and Transverse-Geometry X-ray Magnetic Circular Dichroism in Two-dimensional Magnetic Systems	Prof. T. Koide (KEK-IMSS-PF, Tsukuba)
	10:40-11:10	30	Orbital Polarization and X-ray Absorption Linear Dichroism in Transition-Metal Oxides	Prof. T. Jo (Hiroshima Univ.)
	11:10-11:40	30	XMCD Characterization of Complex Magnetism in Diluted Magnetic Semiconductors	Prof. A. Fujimori (Univ. of Tokyo)
	11:40-12:00	20	Closing	Prof. K. Nasu (KEK-IMSS-PF, Tsukuba)



Domestic Participants



Overseas Participants