# NanoDynamics Beamline Workshop Program $Page\ 1\ of\ 2$

## Thursday, May 22

<b>Introductory Session</b>		Chair: <b>K. Yamada</b>
10:00 – 10:02	A. Baron	Workshop Opening
10:02 - 10:07 10:07 - 11:00	M. Takata A. Baron	Greeting Beamline Outline & Perspective
		Beamane Gaune & Perspective
11:00 – 11:10	Coffee Break	
Phonons I*		Chair: M. Arai
11:10 – 11:50	D. Reznik	A Case for High Intensity IXS based on Inelastic X-Ray and Neutron Scattering Studies of the Cuprates
11:50 - 12:10	K. Ohwada	Intrinsic ferroelectric instability in Pb(In1/2Nb1/2)O3 revealed
12:10 – 12:30	K. Nakajima	by changing B-site randomness: Inelastic x-ray scattering New Opportunities and a View from Neutron Spectroscopy at J-PARC
12:30 – 13:15	Lunch	
Liquids & Glas	ses I	Chair: Y. Kawakita
13:15 – 13:55	T. Scopigno	Inelastic X-ray Scattering with meV resolution: frontiers in non crystalline materials science
13:55 – 14:15	M. Inui	Collective dynamics and the metal-nonmetal transition in supercritical fluid Hg: the picture from viscoelastic theory and the static structure factor
14:15 – 14:35	K. Matsuda	Study of expanded fluid alkali metals
14:35 – 14:55	Y. Kajihara	Dynamical Inhomogeneity in Liquid Te Near Melting
14:55 – 15:05	Coffee Break	
Liquids & Glas	ses II	Chair: H. Fukuyama
15:05 – 15:25	T. Ichitsubo	Different sound velocities observed from ultrasonic and IXS
	V. Kawakita	experiments in a Pd-based metallic glass  Phonon dispersion of metallic glass CuZra
15:25 – 15:45 15:45 – 16:00	Y. Kawakita D. Ishikawa	experiments in a Pd-based metallic glass Phonon dispersion of metallic glass CuZr <sub>2</sub> Toward Dynamics at Liquid Surfaces by IXS
15:25 – 15:45 15:45 – 16:00		Phonon dispersion of metallic glass CuZr <sub>2</sub> Toward Dynamics at Liquid Surfaces by IXS
15:25 – 15:45 15:45 – 16:00 <b>High Pressure</b>	D. Ishikawa	Phonon dispersion of metallic glass CuZr <sub>2</sub> Toward Dynamics at Liquid Surfaces by IXS Chair: M. Inui
15:25 – 15:45 15:45 – 16:00	D. Ishikawa H. Fukui Y. Katayama	Phonon dispersion of metallic glass CuZr <sub>2</sub> Toward Dynamics at Liquid Surfaces by IXS
15:25 – 15:45 15:45 – 16:00 <b><u>High Pressure</u></b> 16:00 – 16:20	D. Ishikawa H. Fukui	Phonon dispersion of metallic glass CuZr <sub>2</sub> Toward Dynamics at Liquid Surfaces by IXS  Chair: M. Inui Precise Elastic Constant Determination by IXS Liquids Under Pressure Perspectives of high pressure IXS study in Earth Science: Study
15:25 – 15:45 15:45 – 16:00 <b><u>High Pressure</u></b> 16:00 – 16:20 16:20 – 16:40	D. Ishikawa H. Fukui Y. Katayama	Phonon dispersion of metallic glass CuZr <sub>2</sub> Toward Dynamics at Liquid Surfaces by IXS  Chair: M. Inui Precise Elastic Constant Determination by IXS Liquids Under Pressure
15:25 – 15:45 15:45 – 16:00 <b>High Pressure</b> 16:00 – 16:20 16:20 – 16:40 16:40 – 17:00 <b>17:00 – 17:10</b>	D. Ishikawa H. Fukui Y. Katayama E. Ohtani Coffee Break	Phonon dispersion of metallic glass CuZr <sub>2</sub> Toward Dynamics at Liquid Surfaces by IXS  Chair: M. Inui Precise Elastic Constant Determination by IXS Liquids Under Pressure Perspectives of high pressure IXS study in Earth Science: Study of the Earth's Core
15:25 – 15:45 15:45 – 16:00 <b>High Pressure</b> 16:00 – 16:20 16:20 – 16:40 16:40 – 17:00 <b>17:00 – 17:10</b> <b>New Direction:</b> 17:10 – 17:30	D. Ishikawa H. Fukui Y. Katayama E. Ohtani Coffee Break Electronic Ex	Phonon dispersion of metallic glass CuZr <sub>2</sub> Toward Dynamics at Liquid Surfaces by IXS  Chair: M. Inui Precise Elastic Constant Determination by IXS Liquids Under Pressure Perspectives of high pressure IXS study in Earth Science: Study of the Earth's Core  **Excitations I** Chair: J. Mizuki Resonant and Non-Resonant IXS in the Cuprates
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15:25 – 15:45 15:45 – 16:00 <b>High Pressure</b> 16:00 – 16:20 16:20 – 16:40 16:40 – 17:00 <b>17:00 – 17:10</b> <b>New Direction:</b> 17:10 – 17:30	D. Ishikawa H. Fukui Y. Katayama E. Ohtani Coffee Break Electronic Ex	Phonon dispersion of metallic glass CuZr <sub>2</sub> Toward Dynamics at Liquid Surfaces by IXS  Chair: M. Inui Precise Elastic Constant Determination by IXS Liquids Under Pressure Perspectives of high pressure IXS study in Earth Science: Study of the Earth's Core  **Ecitations I** Chair: J. Mizuki Resonant and Non-Resonant IXS in the Cuprates Electronic excitations studied by resonant inelastic x-ray scattering Non-resonant inelastic x-ray scattering experiments in the
15:25 – 15:45 15:45 – 16:00 <b>High Pressure</b> 16:00 – 16:20 16:20 – 16:40 16:40 – 17:00 <b>17:00 – 17:10 New Direction:</b> 17:10 – 17:30 17:30 – 17:50  17:50 – 18:10	D. Ishikawa H. Fukui Y. Katayama E. Ohtani  Coffee Break  Electronic Ext. Tohyama K. Ishii N. Hiraoka	Phonon dispersion of metallic glass CuZr <sub>2</sub> Toward Dynamics at Liquid Surfaces by IXS  Chair: M. Inui Precise Elastic Constant Determination by IXS Liquids Under Pressure Perspectives of high pressure IXS study in Earth Science: Study of the Earth's Core  **Ecitations I** Chair: J. Mizuki Resonant and Non-Resonant IXS in the Cuprates Electronic excitations studied by resonant inelastic x-ray scattering Non-resonant inelastic x-ray scattering experiments in the Taiwan IXS beamline
15:25 – 15:45 15:45 – 16:00 <b>High Pressure</b> 16:00 – 16:20 16:20 – 16:40 16:40 – 17:00 <b>17:00 – 17:10</b> <b>New Direction:</b> 17:10 – 17:30 17:30 – 17:50	D. Ishikawa H. Fukui Y. Katayama E. Ohtani  Coffee Break  Electronic Ex T. Tohyama K. Ishii	Phonon dispersion of metallic glass CuZr <sub>2</sub> Toward Dynamics at Liquid Surfaces by IXS  Chair: M. Inui Precise Elastic Constant Determination by IXS Liquids Under Pressure Perspectives of high pressure IXS study in Earth Science: Study of the Earth's Core  **Ecitations I** Chair: J. Mizuki Resonant and Non-Resonant IXS in the Cuprates Electronic excitations studied by resonant inelastic x-ray scattering Non-resonant inelastic x-ray scattering experiments in the

#### <u>18:30 – 20:00</u> Banquet (K. Yamada MC)

<sup>\*</sup>Note: Division into sections for Phonons I & II and Electronic Excitations 1&II is to accommodate some people who will only be available for part of the time.

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### Friday, May 23

### 09:00 - 09:10 T. Ishikawa, Greeting

### New Direction: Electronic Excitations II, Chair: T. Tohyama

09:10 - 09:30	S. Shin	High resolution soft X-ray inelastic scattering on solids and
		liquids.
09:30 - 09:50	S. Tajima	Proposal from Optical Spectrocopy
09:50 - 10:10	H. Okamura	Heavy fermion states in f-electron systems probed by infrared
		spectroscopy

### 10:10-10:25 <u>Coffee Break</u>

Phonons II 10:25 – 10:45	K. Hirota	Chair: <b>D. Reznik</b> Rattling Modes in Pyrochlores
10:45 – 11:05	S. Tsutsui	Guest Modes in Filled Skutterudites and Related Compounds by Inelastic X-ray Scattering
11:05 – 11:25	K. Tomiyasu	Effects of magnetoelastic coupling and orbital wave on phonons in the strongly correlated electron system CoO

### 11:25 – 11:35 <u>Coffee Break</u>

# **Short Suggestions for Experiments & Proposal Strategy** (A. Baron) 11:35-12:15

### 12:15 Workshop Closing

12:15 - 13:30 Lunch

13:30 BL35 Tour for those interested.