



# PROGRAM

## Sapienza-Japan meeting on Spin-Orbital-Lattice correlations induced phenomena in emerging materials

July 3-4, 2023

Sala Lauree, Department of Physics, Sapienza University of Rome

Monday 3 July, 2023

### S1 (Chairperson: N.L. SAINI)

08:30-09:00	<b>Registration</b> – <i>Sala Lauree</i>
09:00-09:10	<b>Opening</b> – <i>Sala Lauree</i>
09:10-09:45	<b>Takuro Katsufuji, Waseda University Tokyo</b> <i>Metal-insulator transition and large negative magnetoresistance in <math>Ba_{3-x}Cu_xNb_5O_{15}</math></i>
09:45-10:10	<b>Valerio Scagnoli, ETH-PSI Zurich</b> <i>Coupling between electronic band structure and magnetic ordering in <math>NaOsO_3</math>: insights from magnetization dynamics experiments</i>
10:10-10:30	<b>Yuki Sakai, KISTEC Kanagawa</b> <i>A-site and B-site charge ordering in perovskite-type <math>PbCoO_3</math></i>

10:30-11:00 Coffee Break

### S2 (Chairperson: T. KATSUFUJI)

11:00-11:35	<b>Takashi Mizokawa, Waseda University Tokyo</b> <i>Domain-dependent surface states with peculiar spin texture in <math>IrTe_2</math></i>
11:35-12:05	<b>Marco Grilli, Sapienza Roma</b> <i>Inhomogeneity and filamentary superconductivity in oxide and transition metal dichalcogenides heterostructures</i>
12:05-12:30	<b>Antonio Polimeni, Sapienza Roma</b> <i>Strained-induced exciton hybridisation in transition metal dichalcogenide monolayers unveiled by high magnetic field photoluminescence</i>

## 12:30-14:00 Lunch

### S3 (Chairperson: T. MIZOKAWA)

14:00-14:35	<b>Hiroshi Eisaki, AIST Tsukuba</b> <i>Competing order in the 1144-type iron-based superconductors</i>
14:35-15:00	<b>Nicola Poccia, IFW Dresden</b> <i>Advances in the twistrionics of high temperature superconductors</i>
15:00-15:15	<b>Luca Tomarchio, Sapienza Roma</b> <i>The Electrodynamics Properties of Superconducting <math>Nd_{0.8}Sr_{0.2}NiO_2</math> Nickelate</i>
15:15-15:30	<b>Giovanni Tomassucci, Sapienza Roma</b> <i>Temperature dependent local inhomogeneity and local magnetic moment of <math>Li_{1-x}Fe_xOHFeSe</math> superconductor</i>

## 15:30-16:00 Coffee Break

### S4 (Chairperson: M. GRILLI)

16:00-16:25	<b>Lilia Boeri, Sapienza Roma</b> <i>Search for ambient superconductivity in the Lu-N-H system</i>
16:25-16:50	<b>Riccardo Mazzarello, Sapienza Roma</b> <i>Phase change materials for data storage and neuromorphic computing</i>
16:50-17:15	<b>José Lorenzana, ISC-CNR Roma</b> <i>Rashba driven superconductivity in incipient ferroelectrics</i>
17:15-17:40	<b>Lorenzo Celiberti, Wien University Wien</b> <i>Janh-Teller polaron in the spin-orbit multipolar magnetic oxide <math>Ba_2NaOsO_6</math></i>
17:40-18:00	<b>Mattia Udina, Sapienza Roma</b> <i>Terahertz driven ionic Kerr effect and dynamical multiferroicity in <math>SrTiO_3</math></i>

Tuesday 4 July, 2023

### S5 (Chairperson: H. EISAKI)

08:30-09:05	<b>Masaki Azuma, Tokyo Institute of Technology Tokyo</b> <i>Magnetization reversal by electric field in Co substituted <math>BiFeO_3</math></i>
09:05-09:30	<b>Eugenio Del Re, Sapienza Roma</b> <i>Spontaneous formation of polarization chiral lattices and supercrystals in near-transition ferroelectric potassium-lithium-tantalate-niobate</i>
09:30-09:55	<b>Boby Joseph, Elettra Sincrotrone Trieste</b> <i>Pressure enhanced superconductivity in cage-type quasi-skutterudite compounds</i>
09:55-10:20	<b>Hena Das, Tokyo Institute of Technology Tokyo</b> <i>Competing magnetic phases and spin-reorientation transitions in ortho-and hexa-ferrites</i>

## 10:30-11:00 Coffee Break

**S6 (Chairperson: M. AZUMA)**

11:00-11:25	<b>Eugenio Paris, SwissFEL – PSI Villigen</b> <i>Probing ultrafast dynamics in correlated materials with time-resolved resonant inelastic x-ray scattering</i>
11:25-11:50	<b>Gaetano Campi, IC-CNR Roma</b> <i>Quantum materials as seen by high resolution X ray synchrotron techniques</i>
11:50-12:10	<b>Federico Stramaglia, SLS-PSI Villigen</b> <i>Probing the interfacial band structure of BaTiO<sub>3</sub>/La<sub>0.8</sub>Sr<sub>0.2</sub>MnO<sub>3</sub> multiferroic heterostructures with ARPES</i>
12:10-12:30	<b>Takumi Nishikubo, KISTEC Kanagawa</b> <i>Systematic charge distribution changes in Bi, Pb-3d transition metal perovskite oxides</i>
12:30	<b>Closing</b>