

COST TO BE FALL MEETING 2017
11-13 September, 2017
Institute of Solid State Physics, University of Latvia (ISSP, UL)
(Kengaraga street 8, Riga, Latvia)
PROGRAMME

11th September (MONDAY)

09:00	Core group meeting (closed meeting)
10:00-10:30	Registration (ISSP, 1st floor)
10:30	Management Committee meeting (closed meeting)
12:30-13:30	LUNCH (own expenses)
11:30-13:30	Registration (ISSP, 1st floor)
13:30	OPENING (Martins Rutkis, Juris Purans)

WG2 Oxides Growth and Fabrication Methods

Chairman:		
14:00	Judith Driscoll	Nanocomposite Films with Strong Room Temperature Converse Magnetoelectric Effect
14:40	Saeedeh Farokhipoor	Mottronics in magnetic domain walls
15:10	Mariona Coll	Compositional tuning of multiferroic BiFeO ₃ thin films for next generation PV by low-cost chemical deposition methodologies
15:25-15:50	COFFEE BREAK	

WG1 Fundamental Understanding of oxides for electronics: Theory and Experiments

Chairman:		
15:50	Rosalba Tatiana Fittipaldi	The intriguing Mott insulating state of Ca ₂ RuO ₄
16:20	Vladislav Kataev	Insights into the spin-orbital entanglement in complex iridium oxides from high-field ESR spectroscopy
16:35	Pavan Nukala	On the origin of ferroelectricity in HfO ₂ -ZrO ₂ thin films
16:50-17:00	SMALL BREAK	

WG3 Oxide-based applications and devices

Chairman:		
17:00	Carmela Aruta	Oxygen ion conduction and surface exchange reaction tuned by rare earth dopant cations in ceria epitaxial thin films
17:30	Guido Faglia	Oxide based chemical gas sensing at the nanoscale
17:45	Ana M Sanchez	Exploring oxide boundaries by Scanning Transmission Electron Microscopy

18:00	Welcome Party & Excursion around the Institute of Solid State Physics
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12th September (TUESDAY)

8:30-9:00	Registration (ISSP, 2nd floor)	
WG1 Fundamental Understanding of oxides for electronics: Theory and Experiments		
Chairman:		
09:00	Antonio Bianconi	Fano resonances in superconducting gaps near Lifshitz transitions in inhomogeneous transition metal oxides with filamentary hyperbolic interface geometry
09:40	Federico Baiutti	Space-charge effects inducing high-temperature superconductivity in La ₂ CuO ₄ - based heterostructures
09:55	Tony Schenk	The Rayleigh Element – Rayleigh Behavior and its Implications for Impedance Spectra of Ferroelectrics
10:10	Roberto Di Capua	Angle-Resolved Photoemission Spectroscopy studies on EuTiO ₃ thin films and related heterostructures
10:25-10:50	COFFEE BREAK	
10:50	Michael Sing	Electronic structure of layered 3d and 5d transition metal oxide architectures
11:20	Daniel Khomskii	Orbital-selective effects in transition metal compounds: “molecules” in solids against magnetism
11:50	Haijiao Harsan Ma	Giant crystalline anisotropic magnetoresistance in nonmagnetic perovskite oxide heterostructures
12:05	Sandeep Kumar Chaluvadi	Thickness dependent magnetic anisotropy studies of bi-axially strained La _{0.7} Sr _{0.3} MnO ₃ thin films on LSAT (001) by Magneto-Optical Kerr Magnetometry
12:20	Dennis Christensen	Coexistence of high electron mobility, colossal magnetoresistance and magnetism at the γ -Al ₂ O ₃ /SrTiO ₃ heterointerface
12:35-14:05	LUNCH (own expenses)	
WG2 Oxides Growth and Fabrication Methods		
Chairman:		
14:05	Salvatore Amoruso	Plume dynamics in pulsed laser deposition with nanosecond and femtosecond pulses
14:35	Alexis Boileau	Synthesis and characterisation of SrVO ₃ thin films deposited on varied substrates at low temperature as a new strategic transparent conductive oxide
14:50	Mathieu Mirjolet	Growth and Characterization of Transparent Conducting SrVO ₃ Thin Films
15:05 - 15:30	COFFEE BREAK	
15:30	Gennady Logvenov	World of high quality complex oxide interfaces: Oxide Molecular Beam Epitaxy - tour de force
16:00	Michael Lorenz	Multiferroic magnetoelectric BiFeO ₃ -BaTiO ₃ superlattices: Chemical interface features by TOF-SIMS and STEM-EDX
16:15	Chiara Sacco	Growth and characterization of SrCuO ₂ /Sr _{0.9} La _{0.1} CuO ₂ /SrCuO ₂ quantum wells
16:30-16:40	SMALL BREAK	
16:40-18:30	Joint Work Group meeting and POSTER SESSION	
~19:00-...	CONFERENCE DINNER at LIDO (~30 EUR)	

13th September (WEDNESDAY)

8:40-9:00	Registration (ISSP, 2nd floor)	
WG1 Fundamental Understanding of oxides for electronics: Theory and Experiments		
Chairman:		
09:00	Bernard Keimer	Magnetic order and excitations in metal-oxide heterostructures
09:40	Yunzhong Chen	Two-Dimensional Electron Gases at Modulation-doped Oxide Interfaces
09:55	Alessia Sambri	Epitaxial ultra thick LAO/STO films
10:10	Roberts Eglitis	First principles calculations of ABO ₃ perovskite (001), (011) and (111) surfaces, interfaces and defects therein

10:25-10:50	COFFEE BREAK	
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WG3 Oxide-based applications and devices		
Chairman:		
10:50	Monica Burriel	Nano engineering of manganites for miniaturized devices
11:20	Lambert Alff	Control of Switching Modes and Conductance Quantization in Oxygen Engineered HfO _x based Memristive Devices
11:50	Catarina Dias	Multi-mode Resistive Switching in Pt/MgO/TaOx/Ta/Ru nanostructures
12:05	Sarunas Bagdzevicius	Interface-type Resistive Switching in double-perovskite GdBaCo ₂ O _{5+δ} thin film devices
12:20	Eric Sandana	Commercial Perspectives for Ga ₂ O ₃

12:35-14:05	LUNCH (own expenses)	
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14:05	Gunnar Niklasson	Electrochromic Films for Smart Windows: Coloration and Degradation Mechanisms
14:35	Qin Wang	Applications of photon-induced phenomena in ZnO based hybrids
14:50	Jike Lyu	Tailoring lattice strain and ferroelectric polarization of epitaxial ferroelectric BaTiO ₃ films on Si(001)
15:05	Vasilis Binas	Room Temperature sensing of ozone by p-type Cu ₂ O nanocubes
15:20	Lars Österlund	Novel self-cleaning films for the built environment: Functionalized and textured TiO ₂ multilayer coatings

< 17:00	CLOSURE	
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