

| Wednesday 13 October | |
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| 08:30 | Registration |
| 09:45 | opening |
| Session 1 - Spin textures and spin transport | |
| 10:00 | Hariom Jani (invited) Antiferromagnetic oxide skyrmionics at room temperature |
| 10:30 | Jorrit Hortensius Coherent spin-wave transport in an antiferromagnet |
| 10:45 | Matthias Opel Magnonic Hanle effect and spin-Nernst effect in antiferromagnetic α -Fe ₂ O ₃ /Pt |
| 11:00 | Carlos Frontera Spin Hall magnetoresistance in La ₂ CoMnO ₆ /Pt bilayers: the prominent role of interfaces |
| 11:15 | coffee break |
| Session 2 - Manipulation of magnetic properties | |
| 11:45 | Manuel Bibes (invited) Ferroelectric control of Rashba states: towards non-volatile spintronics driven by ferroelectricity |
| 12:15 | Andrea Peralta Field effect control of symmetry breaking in SrIrO ₃ ultrathin layers |
| 12:30 | Md Shamim Sarker Electrically tunable YIG magnon FET based on the ionic polymeric gate stack |
| 12:45 | lunch |
| 14:30 | Ankit Disa (invited) Photoinduced high-temperature ferromagnetism in YTiO ₃ |
| 15:00 | Matteo Cialone Voltage-induced ON switching of magnetism in ordered array of nanoporous iron oxide microdisks |
| 15:15 | Lingfei Wang Harnessing the interfacial magnetism of oxide heterostructures via oxygen vacancy engineering |
| Session 3 - Superconductivity | |
| 15:30 | Anand Bhattacharya (invited) Superconductivity in KTaO ₃ interfaces |
| 16:00 | Nicolas Bergeal Multi-condensate superconductivity in oxides interfaces |
| 16:15 | Gyanendra Singh Gate-tunable unconventional superconductivity in 2D oxide interfaces nanodevices |
| 16:30 | Minu Kim Discovery of Superconductivity in (Ba,K)SbO ₃ |
| 16:45 | coffee break |
| Session 4 - Interfaces and heterostructures | |
| 17:15 | Guillaume Marcaud Electronic structure of a 2DEG at the Fe/BaTiO ₃ interface |
| 17:30 | Vladimir N. Strocov Band-Order Anomaly at the γ -Al ₂ O ₃ /SrTiO ₃ Interface drives the electron mobility boost |
| 17:45 | Maria D'Antuono Tunable Ferromagnetic 2DEG nanodevices |
| 18:00 | Alessio Filippetti Doping-induced long-range ferromagnetism in oxide heterostructures |
| 18:15 | Thierry van Thiel Coupling charge and topological reconstructions at oxide interfaces |
| 18:30 | Zhi Shih Lim Crossover between Topological to Karplus-Luttinger Hall Effects in SrRuO ₃ -based heterostructures |
| 19:00 | Welcome cocktail |

Thursday 14 October**Session 5 - MEMS and membranes**

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| 08:30 | Guus Rijnders (invited) Fabrication and properties of epitaxial ferroelectric and piezoelectric devices |
| 09:00 | Laurence Mechin Suspended $\text{La}_{2/3}\text{Sr}_{1/3}\text{MnO}_3$ bridges on silicon substrates for high-performance uncooled infrared bolometers |
| 09:15 | Guillaume Agnus Cantilever magnetoelectric PZT/Tb–Fe–Co resonators for magnetic sensing applications |
| 09:30 | Jutta Schwarzkopf Application of (K,Na)NbO ₃ thin films in surface acoustic wave sensors |
| 09:45 | Pavlo Zubko Depolarization field-induced polarization flop and macroscopic curvature in free-standing PbTiO ₃ -SrTiO ₃ superlattices |
| 10:00 | Alessia Sambri Strain engineering as a tool to fabricate PLD-grown conducting LaAlO ₃ /SrTiO ₃ micro-membranes |
| 10:15 | Shingo Genchi Characterization of Verwey transition property in Fe ₃ O ₄ thin films grown on transferable h-BN substrate |
| 10:30 | coffee break |

Session 6 - Vanadates and Niobates

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| 11:00 | Javier del Valle Length and time-scales of the voltage-triggered insulator-to-metal transition |
| 11:15 | Josep Fontcuberta Electron-electrons correlations, electron-phonon coupling and plasmon excitation in metallic oxides |
| 11:30 | Peter A. van Aken Strain-Driven Metal-to-Insulator Transition and Charge Ordering in LiV ₂ O ₄ |
| 11:45 | Stefan Guénon Imaging of electrothermal filament formation in a Mott insulator |
| 12:00 | Aditya Sood Operando ultrafast electron diffraction reveals phase dynamics in vanadium dioxide switches |
| 12:15 | Kei Takahashi Carrier doping effect in 2D Mott insulator SrVO ₃ ultra-thin films grown by gas source molecular beam epitaxy |
| 12:30 | lunch |

Session 7 - Nickelates

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| 14:00 | Harold Hwang (invited) Superconductivity in infinite-layer nickelates |
| 14:30 | Claribel Dominguez Coupling of magnetic phases at nickelate interfaces |
| 14:45 | Arturas Vailionis Unique strain state at the LaNiO ₃ /LaAlO ₃ (111) interface |
| 15:00 | Lucía Iglesias First-principles study of electron and hole doping in perovskite nickelates |
| 15:15 | Jennifer Fowlie Ultrathin toolbox: photon-based methods to probe structures towards the atomic scale |
| 15:30 | coffee break |

Session 8 - Theoretical insight

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| 16:00 | Alex Zunger (invited) The peculiarities of paraelastic, paramagnetic and paraelectric phases of cubic oxide perovskites explained as consequences of polymorphous network |
| 16:30 | Alex Demkov Theory of Electro Optic Effect in Thin Oxide Films |
| 16:45 | Wei Peng Flexo-polar phase transition in a metal |
| 17:15 | Poster Session |
| 19:00 | Genova Hystorical center tour |
| 20:30 | Social Dinner |

Friday 15 October

08:00

Poster Session

10:00

light coffee break

Session 9 - Applications

10:30

Anh Le Duc (invited)

Ambipolar control of high-mobility carriers at a wide-gap oxide interface and applications towards oxide-based electronics

11:00

Mark Huijben

Enhanced battery cycling and rate capability by epitaxially matched conductive cubic TiO coating on LiCoO₂ cathode films

11:15

Hai-Tian Zhang

Brain-machine interfaces utilizing ionic-electronic signal transduction in complex oxides

11:30

Alejandro López Fernández

Electrolyte gated synaptic transistor based on ultra-thin La_{0.7}Sr_{0.3}MnO₃

11:45

Jochen Mannhart (invited)

Advancements for Oxide Electronics: Novel Film Growth Technology and Novel Quantum Electronics

12:15

Felix V. E. Hensling

A high-performance epitaxial transparent oxide thin-film transistor fabricated at back-end-of-line temperature (< 450 °C) by suboxide molecular-beam epitaxy

12:30

Jasnamol P. Palakkal

Effect of stoichiometry on the optical and electronic properties of transparent conducting SrNbO₃ grown by oxide molecular beam epitaxy

12:45

Fengmiao Li

The uniqueness of MBE-grown TiO in the series of 3d transition metal monoxides

13:00

closing

13:15

lunch