We 19

8:30 8:45 9:00	**Registration**	
9:15	**Opening**	
9:30 9:45 10:00	**Stuart S.P. Parkin** **Non reciprocal superconductivity**	
10:15 10:30	**Coffee Break**	
10:45 11:00	**O. A. Fumega** 2D van der Waals multiferroics. Theory and Atomic-scale Experiments.	**N. Poccia** Advances in the twistronics of cuprate superconductors
11:15	**L. Maranzana** Spiral multiferroics as a natural skyrmion racetrack	**M. Trama** Self-consistent surface superconductivity in time-reversal symmetric Weyl semimetals
11:30	**G. Bellomia** Engineering strongly correlated magnetic states in a quantum spin-Hall insulator with the help of quantum information theory	**A. Maiellaro** Engineered Josephson diode effect in kinked Rashba nanochannels
11:45	**Y. Chen** Dirac-like fermions anomalous magneto-transport in a spin-polarized oxide twodimensional electron system	**R. Vaglio** Surface heating in HTS-based high field pulsed RF cavities
12:00	**A. Abdelsamie** Electric field induced switching of antiferromagnetic states in single-domain multiferroic BiFeO3	**N. Pompeo** Microwave studies of the vortex dynamics in FeSeTe thin films: flux flow, anisotropy, pinning and effect of heavy-ions irradiation
12:15	**L. Camerano** Symmetry broken phases and magneto-orbital coupling in Vanadium trihalides	**A. Leo** QUEnch mechanisms Study In supercONductors for Safe energy and energy Saving: the QUESTIONs project
12:30	**I. K. Nikolov** Doping dependence of charge ordering and exotic magnetic phases in kagome superconductors	**A. Santacesaria** Two-phonon pairing mechanism for incipient ferroelectrics
12:45 13:00 13:15 13:30 13:45 14:00 14:15	**Lunch**	
14:30 14:45	**G. Serrano** Magnetic hysteresis of bidimensional films of molecular magnets on superconductors	**L. Malavasi** Chiral metal halides: design and chiroptical properties
15:00	**S. Tobisch** Complex structural arrangements at the CO2/In2O3(111) interface	**M. Valadan** Novel 2D Magnetic Nano-complexes for MRI application
15:15	**M. Mosaferi** (to be confirmed) Strain-Induced Multiple Topological Phase Transitions in Conjugated Polyacene Polymers: A First-Principles Study	**S. Sanna** Spin-charge-lattice coupling in relativistic double perovskite Mott insulators
15:30	**M. Nabi** Ferromagnetic chiral hybrid organic-inorganic perovskites	**G. Fioravanti** Revisiting the influence of metal impurities and structural defects on the intrinsic paramagnetism of Graphene Oxide (GO)
15:45	**M. Rath** Scanning tunneling microscopy and x-ray photoemission studies of NdNiO2 infinite-layer nickelates films	**G. Pavese** Wafer-scale co-sputtering of Na-rich K(1-x)Na(x)NbO3 films for control of microstructure and ferroelectric performance
16:00 16:15	**Coffee Break**	
16:30	**E. Piatti** Superconductivity induced by gate-driven hydrogen intercalation in the charge-density-wave compound 1T-TiSe2	**A. Galdi** Atomic-level study and optimization of solid oxide fuel cell electrodes via operando x-ray absorption spectroscopy
16:45	**G. Gavello** Evidence of multi-gap superconductivity in H-intercalated 1T-TiSe2	**A. Omelyanchik** Effect of Shell Architecture on Magnetic Properties of Bi-Magnetic Core/Shell Oxide Nanoparticles
17:00	**N. Di Eugenio** Radiation Damage Modeling in High-Temperature Superconducting Materials with Atomistic Simulations	**V. De Olivera Lima** Anomalous magnetoresistance driven by interfacial proximity in YBCO/SRO and SRO/YBCO heterostructures
17:15	**A. Magalotti** Superconducting materials for axion dark matter detection and other high frequency / high field applications	**S. Tosoni** Density Functional Theory Investigation of Transition Metal Nanoclusters on MgO (100) and MgO (100)/Ag (100): Toward Realistic Models of Supported Catalytic Particles
17:30	**Y. Yerin** Non-reciprocal transport phenomena in multi-band superconductors	**M. Zinouyeva** High resolution RIXS reveals local distortions in high entropy oxides
17:45 18:00 18:15 18:30	**Poster session** **(Cheese & Wine)**	

Th 20

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9:30 — **A. Ballarino**
9:45 — Superconductivity for present and future colliders

9:30 — **C. Franchini**
9:45 — Machine Learning for Oxides

10:00 — **A. Leveratto**
Thallium-1223 films: a high temperature superconductor for the Future Circular Collider beamscreen

10:15 — **M. R. Khan**
Characterization of REBCO tapes towards energy applications

10:30 — **M. Cialone**
Simple and low-cost Architecture for Iron-based Coated Conductors

10:00 — **B. Gianfelici**
Defect induced polaron hopping in the hybrid MoO3-Cu heterojunction

10:15 — **L. J. D'Onofrio**
Orbital angular momentum polarization effects in oxides

10:30 — **S. Lupi**
Equilibrium and Out of Equilibrium Polaronic Electrodynamics

10:45 — **Coffee Break**
11:00

11:15 — **R. Gonnelli**
The order-parameter symmetry of Sr2RuO4 by directional Andreev-reflection spectroscopy

11:30 — **C. Guarcello** (to be confirmed)
Thermoelectric signatures of order-parameter symmetries in iron-based superconducting tunnel junctions

11:45 — **M. Fracasso**
How to predict and mitigate thermomagnetic instabilities in MgB2 bulks

11:15 — **S. Bandyopadhyay**
Non relativistic spin splitting in oxide perovskites

11:30 — **E. A. Martinez**
Comprehensive interfacial study of 2D electron gases generated in Si3N4/Al//KTaO3 heterostructures

11:45 — **L. Celiberti**
Spin-orbit Jahn-Teller bipolarons in Ba2Na1-xCaxOSO6

12:00 — **Beatriz Noheda**
12:15 — **Ferroelectrics as artificial synapses**
12:30

12:45 — **Lunch**
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14:15 — **Jeroen van der Brink**
14:30 — **Topological surface superconductivity in PtBi2**
14:45

15:00 — **F. Caglieris**
Evolution of dissipative regimes in atomically thin Bi2Sr2CaCu2O8+x superconductor

15:15 — **P. M. Forcella**
Pressure Induced Superconductivity in HgS

15:30 — **N. Stegani**
Spontaneous Hall effect in superconducting materials

15:45 — **A. Angeletti**
Unveiling Metastable Disordered Phases In Superconductor N-doped LuH3

15:00 — **N. Colonna**
Koopmans spectral functionals: Bridging density-functional and many-body perturbation theory

15:15 — **F. Cilento**
On the light-induced rotated CDW phase in Tritelluride compounds

15:30 — **P. Di Pietro**
Terahertz driven nanosecond dynamics of oxygen defect state in anatase TiO2-x

15:45 — **F. Locardi**
Inside the local structure of the emissive AECuSi4O10 (AE: Ca, Sr, Ba) compounds

16:00 — **Coffee Break**
16:15

16:30 — **J. Lorenzana**
Ternary nickel hydrides and silver fluorides: towards ambient pressure high-Tc superconductivity without cuprates

16:45 — **P. Bonfà**
Low-temperature electronic transition in RbV_3Sb_5 revealed by avoided Level Crossing muon-spin rotation technique

17:00 — **L. F. Tocchio**
Intertwined superconductivity and orbital selectivity in a three-orbital Hubbard model for the iron pnictides

17:15 — **N. Lo Gullo**
Dissipative and Josephson currents through flat bands: a non-Equlibrium Green function approach

17:30 — **S. Gutowska**
Theoretical study of electron-phonon coupling and superconductivity of high entropy alloys

16:30 — **P. Settembri**
Evidence of spin and charge density wave in Chromium electronic bands

16:45 — **S. Artyukhin**
Magnetoelectric switching in spiral multiferroics

17:00 — **A. Buzdakov**
Ultrafast melting of antiferromagnetic order in Cr2O3

17:15 — **J. Fiore**
Fingerprints of amplitude (Higgs) and phase (Josephson plasmons) superconducting collective modes in THz two-dimensional coherent spectroscopy

17:30 — **M. Parodi**
Modelling thermal transport in spiral magnets

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Social Dinner (20:00)

Fr 21

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9:30 — **Paolo Radaelli**

9:45 — **Title to be defined**

10:00

10:15 — **F. Bisti**

10:30 — Many-body band renormalization in highly doped graphene

S. Sharma

Femto-phonon magnetism

10:45 — **M. Iannetti**
Edge states of the triangular QSH insulator Indenene

P. Fachin
Quantized Born Effective charges as probes for the topological phase transition in the Haldane and Kane-Mele models

11:00 — **M. Ceccardi**
Field effect tuning of the transport properties of the Weyl semimetal candidate MnBi2Te4

S. Macis
Terahertz and Infrared Plasmon Polaritons in PtTe2 Type-II Dirac Topological Semimetal

11:15 — **Coffee Break**

11:30

11:45 — **G. A. Ummarino**
Can the noble metals (Au, Ag, and Cu) be superconductors?

S. Mocatti
Semiconductor Bloch Equations and Ehrenfest Dynamics in a Wannier Function Framework: An Integrated Approach to Ultrafast Electron and Ion Dynamics

12:00 — **R. Arpaia**
Charge density fluctuations and their interplay with spin excitations in cuprate superconductors

L. Monacelli
Ultrafast quantum ionic dynamics to stabilize hidden phases of matter

12:15 — **M. Aktas**
Multiple Topological Phase Transitions in polyacene polymers: An ab-initio parametrised 4-site SSH model

M. Fortino
Atomistic simulations of lead- and tin-based chiral hybrid perovskites

12:30 — **H. Rostami**
Ultrafast light-driven optical rotation and hidden orders in bulk WSe2

F. Gabriele
Terahertz-driven parametric excitation of Raman-active phonons in LaAlO3

12:45 — **M. Faley**
Superconducting nanostructures and 2D superconducting materials for operation in transmission electron microscopes

M. Ruggeri (to be confirmed)
Charge Density Wave phase transition in bulk 1T-TaSe2 using angle-resolved temperature dependence Raman spectroscopy

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