

International Workshop on Advances in Quantum Magnetism and Superconductivity (Parma, January 8–9, 2026)

At [Auditorium “Centro Sant’Elisabetta”](#) Parco Area delle Scienze 93/A - 43124 Parma

Website: <https://advmagsc.eu>

8 January

| | |
|-------|---------|
| 14:30 | Welcome |
|-------|---------|

Prof. Paolo Martelli

Rector of the Univ. of Parma

Prof. Adriano Tomassini

Head of the Department of Mathematical, Physical and Computer Sciences, University of Parma

Prof. Stefano Carretta

Department of Mathematical, Physical and Computer Sciences, University of Parma

Chairs: S. Carretta, M. Solzi

| | | | |
|-------------|-------------------------|----------------------------|--|
| 15:00–15:30 | Roberto De Renzi | University of Parma, Italy | <i>Quantum magnetism and superconductivity from the INPS viewpoint</i> |
| 15:30–16:00 | Stephen Blundell | University of Oxford, UK | <i>Spin eccolo: quantum coherence and the muon</i> |
| 16:00–16:30 | Bernd Büchner | IFW Dresden, Germany | <i>Topological superconductivity in PtBi₂</i> |
| 16:30–16:50 | Coffee Break | | |

Chairs: M. Riccò, P. Santini

| | | | |
|-------------|-------------------------|---|--|
| 16:50–17:20 | Vesna Mitrović | Brown University, USA | <i>Probing Ground State Wavefunction Evolution through Magnetic Phase Transition in Layered van der Waals Material</i> |
| 17:20–17:50 | Pietro Carretta | University of Pavia, Italy | <i>Very low-frequency fluctuations emerging from competing interactions: from iron-based superconductors to metal-organic frameworks</i> |
| 17:50–18:10 | Roberto Caciuffo | Italy | <i>XMCD and RIXS studies probing ground and excited states in the metallic ferromagnet AmFe₂</i> |
| 18:10–18:30 | Renato Gonnelli | Politecnico di Torino, Italy | <i>Multi-gap nature of superconductivity in gate-driven hydrogen intercalated 1T-TiSe₂</i> |
| 20:00 | Dinner | <i>I Tri Siochett - Ristorante Trattoria, Strada Comunale Farnese, 74/A, 43125 Parma PR</i> | |

9 January

Chairs: P. Bonfà, M. Ghidini

| | | | |
|-------------|-----------------------------|--------------------------------------|---|
| 09:30–09:50 | Hubertus Lütkens | Paul Scherrer Institute, Switzerland | <i>Magnetic and charge density wave order in La₃Ni₂O₇, La₂PrNi₂O₇, and La₄Ni₃O₁₀ as a function of pressure and oxygen-isotope substitution</i> |
| 09:50–10:10 | Adrian Hillier | ISIS Neutron and Muon, UK | <i>Superconductivity from the first ISIS spectrometer to Super-MuSR</i> |
| 10:10–10:30 | Giacomo Ghiringhelli | Politecnico di Milano, Italy | <i>Antiferromagnetic order of CaCuO₂ studied by neutrons, muons and x-rays</i> |
| 10:30–11:00 | Coffee Break | | |

Chairs: G. Allodi, S. Sanna

| | | | |
|-------------|---------------------------|-------------------------------|---|
| 11:00–11:20 | Josè Lorenzana | CNR, Rome, Italy | <i>Dynamic Rashba mechanism of superconductivity in incipient ferroelectrics</i> |
| 11:20–11:40 | Giulia Serrano | University of Florence, Italy | <i>Probing the interaction between Single Molecule Magnets and Superconductors by Synchrotron Radiation and Muon Spectroscopy</i> |
| 11:40–12:00 | Marina Putti | University of Genoa, Italy | <i>Sensing the vortex state of a vdW type-II superconductor by Fe-based Single Molecule Magnets</i> |
| 12:00–12:20 | Ruggero Vaglio | University of Naples, Italy | <i>Current redistribution effects in superconductors</i> |
| 12:20–13:00 | Concluding remarks | | |
| 13:00 | Conclusion | | |