

MARVEL Fest: party-ing away

July 9, 2026 – Forum Rolex, EPFL

08:15 Registration

09:00 Welcome and introduction

Nicola Marzari (EPFL)

09:15 The quantum of materials

Chair: Joost VanDeVondel (ETHZ / CSCS)

- *Quantum and AI for a future of materials marvels*
Matthias Troyer (Microsoft)
- *Magnetically controlled optical effects in Eu-based conductors*
Ana Akrap (University of Zagreb)
- *First-principles methods for magnetotransport calculations in real materials with WannierTools*
Quansheng Wu (Institute of Physics – Chinese Academy of Sciences)
- *There's plenty of MARVEL at the bottom: Quantum materials from topology to technology and industry*
Antimo Marrazzo (SISSA, Trieste)

10:55 Coffee break

11:30 The design of materials

Chair: Anirudh Raju Natarajan (EPFL)

- *From alchemy to AI and back*
Anatole von Lilienfeld (University of Toronto)
- *From promising to realistic energy materials*
Julia Wiktor (Chalmers University of Technology)
- *Unraveling subnanocluster stability, fluxionality and adsorbate coverage with MLIPs*
Rubén Laplaza Solanas (University of Sevilla)

12:45 Signature, CECAM-PSI agreement

Andrea Cavalli (CECAM), Barbara Montanari (STFC), Christian Rüegg (PSI)

12:55 Lunch

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14:15 Round table: The future of materials

Chair: Nicola Nosengo (EPFL)

- Raffaella Cabriolu (Norwegian University of Science and Technology)
- Ganna (Anya) Gryn'ova (University of Birmingham)
- Giulia Mangione (Stellantis)
- Senja Barthel (Vrije Universitet Amsterdam)

15:00 The machine learning of materials

Chair: Michele Ceriotti (EPFL)

- *The MARVELous age of atomistic machine learning*
Jigyasa Nigam (MIT)
- *Sample-efficient design of molecules and materials – towards synthesis*
Philippe Schwaller (EPFL)
- *Enabling catalyst innovation with machine learning: Connecting high-throughput computation and experiment*
Sandip De (BASF)

16:15 Coffee break

16:45 The community of materials

Chair: Sara Bonella (EPFL)

- *From research communities to AI-enhanced collectives: Why the social fabric of science matters more than ever*
Barbara Montanari (STFC Scientific Computing)
- *Electronic-structure research and community in sub-Saharan Africa: A personal and a collective journey*
Garu Gebreyesus (University of Ghana)
- *Project GlasAgent – Building blocks for agentic glass development*
Leopold Talirz (SCHOTT)

18:00 Apéro

19:00 End

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