



# Correlations and Topology in Moiré Materials

Monte Verità, Ascona, Switzerland, 27 – 30 July 2025



## Scope

This workshop will bring together leading experimentalists and theorists in the field of strongly correlated and topological moiré materials: a new class of quantum materials with highly tunable properties. In particular twisted bilayer graphene and bilayer transition-metal dichalcogenides have shown to realize unconventional electron phases, ranging from strange metals, fractional Chern insulators to exotic magnetic states, Mott insulators and heavy fermion physics. Understanding these phases is one of the key questions of quantum matter research. Our workshop will focus on comparing theory to experiments of correlated moiré materials, and enhancing collaboration within the moiré community through intensive discussions. The goal of this workshop is to establish the current state-of-the-art knowledge for correlated moiré materials, and relevant open research questions for future research.

## Invited speakers

### Strange metals

**Dmitri Efetov** - Ludwig Maximilian University of Munich

**Antoine Georges** - Flatiron Institute - Collège de France  
- Ecole Polytechnique - Université de Genève

### Fractional quantum Hall states

**Xiaodong Xu** - University of Washington

**Sid Parameswaran** - University of Oxford

**Dan Mao** - ETH Zürich

### Mott insulators

**Atac Imamoglu** - ETH Zürich

**Leni Bascones** - Instituto de Ciencia de Materiales de Madrid

### Superconductivity

**Abhay Pasupathy** - Columbia University

**Mitali Banerjee** - Ecole Polytechnique Fédérale de Lausanne

## Organizers

**Laura Classen** - Max Planck Institute for Solid State Research

**Louk Rademaker** - Université de Genève

**Cecile Repellin** - Laboratory of Physics and Modeling of Condensed Matter CNRS

**Glenn Wagner** - ETH Zürich

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## Deadlines


Application and abstract submission until **February 17th 2025**.

Notification of acceptance by **end of March 2025**.

## Location

The workshop will take place in **Congressi Stefano Franscini (CSF)** center in Monte Verità, Ascona, Ticino, Switzerland.

**ETH** zürich

 **Swiss National  
Science Foundation**

 **cecam**  
Centre Européen de Calcul Atomique et Moléculaire

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Swiss Quantum Initiative