



Workshop on Correlations in Novel Quantum Materials, CNQM 2022

# Public interdisciplinary panel discussion

Tuesday, June 21st, 2022 · 6 pm

Max Planck Institute for Solid State Research  
Heisenbergstraße 1, 70569 Stuttgart

Lecture Hall 2D5

The 2021 Nobel Prize in physics was awarded **“for groundbreaking contributions to our understanding of complex systems”**. But what are complex systems and what makes them special?

## “Emergence 2.0: Philosophy, Quantum Materials, and Artificial Intelligence”.

The concept of emergence is central to the collective behavior of complex systems in a variety of research fields ranging from quantum materials and statistical physics to biological micro-organisms, machine learning, and, in its strongest form, even to the notion of consciousness. This panel discussion will bring together experts from philosophy, quantum physics, and computer science to discuss the phenomena of complexity with the general public.

### Panelists:



**Prof. Dr. Patricia Palacios**  
(Philosopher, University Salzburg/Ludwig-Maximilian-University Munich)



**Prof. Dr. Jörg Schmalian**  
(Physicist, Karlsruhe Institute for Technology)

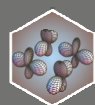


**Prof. Dr. Marco Huber**  
(Computer Scientist, University of Stuttgart)

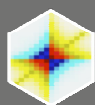
*“MORE IS DIFFERENT.”* P.W. Anderson (Physics Nobel Laureate 1977)

### Organizing Committee

MPI for Solid State Research



Elio J. König



Thomas Schäfer



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