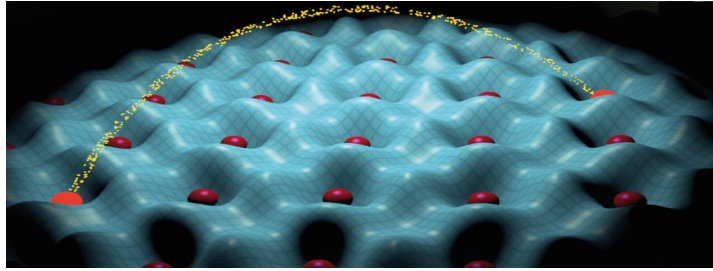


# Challenges and perspectives in resonator-mediated quantum many-body physics: From atoms to solid state



Contribution ID: 9

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## Discussion 1: Solid state systems in cavities; equilibrium vs driven light-matter states

*Monday, 17 June 2024 16:30 (1 hour)*

Possible topics:

What are promising engineering principles for solid state systems (electronic motion, nuclear spins)? What are the interesting many-body states of matter to create, and how to probe them?

Is driving crucial to obtain interesting stationary states in resonators, or can equilibrium properties be modified substantially by the presence of cavities?

What are the open / non-understood issues in solid state? Could quantum simulation with cold atoms help to elucidate these questions, and how to translate concepts from one field to the other?

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