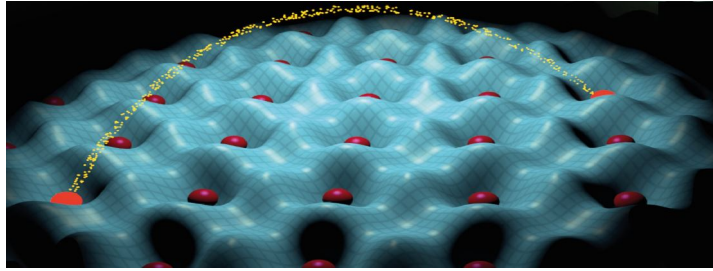


Challenges and perspectives in resonator-mediated quantum many-body physics: From atoms to solid state



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”Realizing and probing strongly correlated states of the quantum fluid of light”

Tuesday 18 June 2024 15:00 (1 hour)

In this talk I will review the state-of-the-art of the theory and experiments aiming at the stabilization and the manipulation of strongly correlated fluids of light. A special attention will be paid to Mott insulator and fractional quantum Hall states, for which pioneering experiments have appeared. Perspectives towards the observation of novel many-body effects in these systems will be outlined, such as non-equilibrium Goldstone modes, fractional statistics, and entangled states of collective excitations.

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