



# Sommerfeld Theory Colloquium

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Moire Systems as Quantum Simulators of Many Strongly Correlated System

We will review the beginning of experimental and theoretical studies of moire systems and their evolution up to present. We will show how thousands of p orbitals in a moire unit cell of graphene can create single Heavy fermion at moire scale, and how the interaction between such fermions can lead to a perfect quantum simulator of an Anderson model. We will then present a catalogue of possible twistable materials and show how a huge variety of strongly interacting models can be realized in twisted homo and hetero twisted bilayers and multilayers of these materials.

Wednesday, 18 December 2024, 16:15h, Room A348, Theresienstr. 37/III

Prof. Dmitri Efetov and Prof. Uli Schollwöck