



Sommerfeld Theory Colloquium

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FLAT BANDS designing and perturbing flatband networks

Certain tight binding lattices host macroscopically degenerate flat spectral bands. Their origin is rooted in local symmetries of the lattice, with destructive interference leading to the existence of compact localized eigenstates. I will present progress in flat band theory and experiments. I will discuss classification principles, flat band generators, surprises in two dimensions, and the impact of perturbations. Finally I will discuss recent progress in the fabrication of semiconductor structures which lead to the observation of flatbands and their corresponding compact localized excitations with exciton-polariton condensates and light.

Wednesday, 17 May 2017, 16:15h, Room A348/349, Theresienstr. 37/III

Prof. Jan von Delft, Dr. Oleg Yevtushenko