

Friday, 13.12.2024, 1:15 p.m.
in Lecture Hall I of the Physics Institute



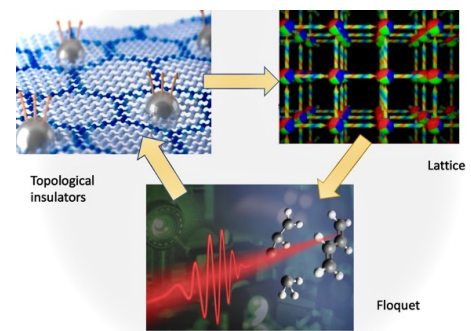
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„Floquet physics and Lattice fermions“

Different subfields of physics sometimes share a common thread which is often recognized only in hindsight. I will briefly highlight such an example from the past pointing to ties between lattice QCD and condensed matter physics.

I will then share recent developments which suggest that similar ties may exist between a class of non-equilibrium quantum systems known as Floquet insulators and discrete time lattice fermion theories.

Floquet insulators are periodically driven quantum systems that can host novel non-equilibrium phases as a function of the drive parameters. I will show that the spectrum of a certain 1+1 dimensional Floquet system can be replicated exactly using a discrete time static relativistic fermion and how such correspondence may be extended to higher dimensions.



Everybody is welcome, especially students of all semester

