



Tuesday, February 20<sup>th</sup>, 2018 – 11:00 a.m.  
CFEL Seminar room IV (Bldg. 99)

## Emanuele Dalla Torre

Bar-Ilan University, Israel

### From Floquet engineering to prethermalization of periodically driven systems

In this talk, I will give an introduction to the concept of "Floquet engineering", focusing on the case of one-dimensional spin chains. I will then explain why the experimental realization is usually hindered by heating, and present a few proposed methods to solve this problem. In particular, I will discuss the use of high-frequency drives, where pre-thermalization is observed. My talk will mostly focus on interacting quantum systems, but I will show that these concepts are relevant to the dynamics of classical systems as well.

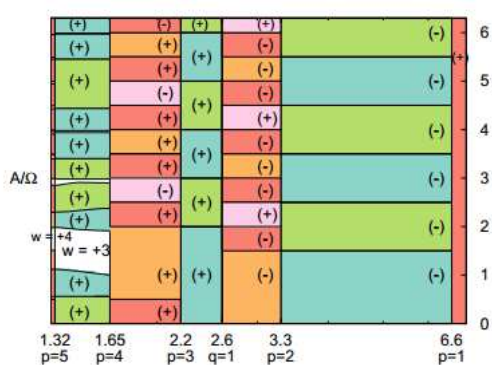


Figure: phase diagram of the periodically driven Ising model  
[Russomanno, Friedman, Dalla Torre, Phys. Rev. B 96, 045422 (2017)]

Host: Angel Rubio

