



Optical Response of Aperiodic Arrays of Atoms

The goal of this project is to explore the optical response of aperiodic atomic arrays, with particular emphasis on how structural irregularities and correlated disorder shape collective light-matter interactions. Our approach will employ a coupled-dipole theoretical framework to characterize the system's eigenmodes, analyze scattering spectra, and investigate localization phenomena emerging from the underlying geometry.

- We seek highly motivated candidate with a strong background in physics and math.
- The selected candidate will join a young and dynamic international research group lead by Dr. Alejandro Manjavacas.

Relevant Publications:

- Phys. Rev. Applied 13, 054054 (2020)
- Commun. Phys 2, 71 (2019)
- Phys. Rev. Lett. 118, 133605 (2017)
- Phys. Rev. Lett. 105, 113601 (2010)

More information:

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