

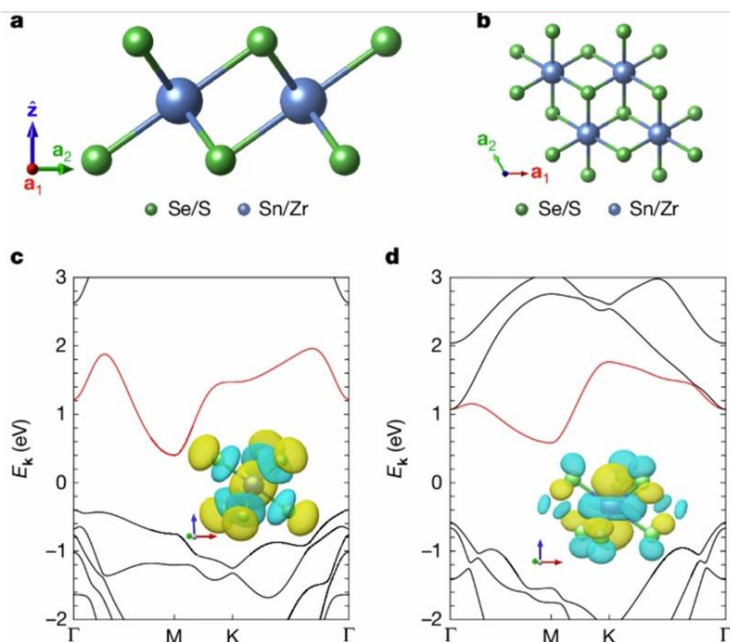
COLLOQUIUM FÉDÉRATION FRIEDEL JACQUINOT

Mercredi 17 Décembre 2025 – Amphi A1 du Bâtiment Hbar

12h30 : Séminaire de Bogdan Andrei Bernevig

The rise of Moiré systems

We will review the beginning of experimental and theoretical studies of moire systems and their evolution up to present.



This type of systems represent a new way of “growing” materials, and has tremendous potential both for fundamental physics as well as for applications. Two dimensional periodic crystals, whose separation between atoms is of order angstroms, can be twisted controllably with respect to each other such that they form new “periodicities”, called moire periodicities. In the new “unit cell” we find thousands of atoms of the original crystal. These atoms behave in ways that are incredibly counterintuitive.

Bogdan Andrei Bernevig is a professor of condensed matter physics at Princeton University. His research focuses on topological insulators and other topological quantum materials. His work has been awarded numerous prizes, including the 2019 James C. McGroddy Prize of the American Physical Society and the 2023 EPS Europhysics Prize.

