

## PDE's & FLUID MECHANICS GRAPHENE

**PLACE:** Aula Naranja, ICMAT (Campus de Cantoblanco, Madrid)

DATE: Wednesday, 24 January, 2018 - 15:00 h

SPEAKER: Charles Fefferman (Princeton University)

**ABSTRACT:** Graphene is a 2-dimensional material consisting of carbon atoms sitting at the centers of regular hexagons that tile the plane. A natural model for graphene is a Schroedinger operator on L^2(R^2) with a potential exhibiting the symmetries of that tiling (the "one-electron model"). The talk explains recent attempts to derive some of graphene's remarkable properties as rigorous theorems for that model.

Joint work with James Lee-Thorp and Michael Weinstein.











