

Theory and Computation for 2D Materials

January 13-17, 2020

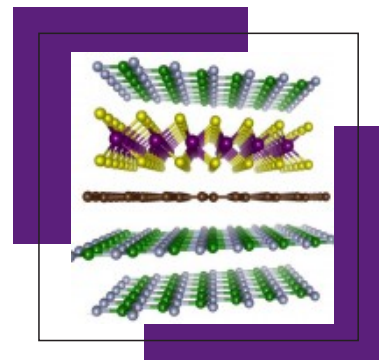
Scientific Overview

The unique electronic, optical, and mechanical properties of 2D materials have sparked an extraordinary level of experimental, theoretical, and computational activity in the materials science and physics communities. Interest in the mathematics community has recently emerged to develop rigorous foundations, improved models, and computational methods. This IPAM workshop will enable exchanges among the mathematics community and the theoretical and computational materials science and physics communities working on 2D materials. Topics to be discussed include electronic structure, transport, plasmonics, and mechanics.

This workshop will include a poster session; a request for posters will be sent to registered participants in advance of the workshop.

Participation

Additional information about this workshop including links to register and to apply for funding, can be found on the webpage listed below. Encouraging the careers of women and minority mathematicians and scientists is an important component of IPAM's mission, and we welcome their applications.



Organizers

Pilar Ariza (University of Sevilla), Eric Cancès (École Nationale des Ponts-et-Chaussées), Efthimios (Tim) Kaxiras (Harvard University), Mitchell Luskin (University of Minnesota, Twin Cities), Dionisios Margetis (University of Maryland), Noa Marom (Carnegie Mellon University), and Michael Weinstein (Columbia University).

Speakers

Andrea Alu (CUNY), Pilar Ariza (University of Sevilla), Dimitri N. Basov (Columbia University), Eric Cancès (École Nationale des Ponts-et-Chaussées), Stephen Carr (Harvard University), Paul Cazeaux (University of Kansas), Pratibha Dev (Howard University), Alexis Drouot (Columbia University), Nader Engheta (University of Pennsylvania), Shiang Fang (Harvard University), Michael Fogler (UCSD), James Hone (Columbia University), Efthimios (Tim) Kaxiras (Harvard University), Eun-Ah Kim (Cornell University), Antoine Levitt (École Nationale des Ponts-et-Chaussées), Xingjie Helen Li (University of North Carolina), Andy Lucas (University of Colorado Boulder), Mitchell Luskin (University of Minnesota, Twin Cities), Allan MacDonald (University of Texas at Austin), Dionisios Margetis (University of Maryland), Noa Marom (Carnegie Mellon University), Daniel Massatt (University of Chicago), Prinaha Narang (Harvard University), Jacob Shapiro (Columbia University), Alexander Watson (Duke University), and Michael Weinstein (Columbia University).

