



Fundamental Aspects of Graphene and Other Carbon Allotropes

January 9 – 13, 2012
KITP, Santa Barbara, CA, USA

Graphene, the two-dimensional honeycomb lattice of carbon atoms, have taken both scientific and technological communities by storm since its experimental isolation in 2004. It has emerged as the new “wonder material” and model system for condensed matter physics, because of its extraordinary electronic, mechanical, thermal, and optical properties. The field of graphene research has undergone an explosive growth that continues unabated for the past 7 years, with exciting new discoveries announced almost weekly.

The one-week graphene conference will focus on fundamental aspects of single- and few-layer graphene as well as other carbon allotropes, by highlighting the latest theoretical and experimental developments in graphene physics and facilitating discussion between theorists and experimentalists. Topics include but are not limited to integer and fractional quantum Hall effects, electronic interactions, broken symmetries in bilayer and trilayer graphene, layered composite materials based on graphene, opto-electronic interactions, effect of strain and stacking, carrier chirality, spintronics and magnetism in graphene.

For details and application, see
<http://www.kitp.ucsb.edu/activities/dbdetails?acro=graphene-c12>
Deadline for applications: 1 November 2011

Organizers

Antonio Castro Neto
Vladimir Fal'ko

Francisco Guinea
Jeanie Lau

Partial List of Invited Speakers

Eva Andrei
Michael Crommie
Sankar Das Sarma
Millie Dresselhaus
Toshiaki Enoki
Klaus Ensslin
Andrea Ferrari
Albert Fert
Michael Fuhrer
Andre Geim
Tony Heinz
Pablo Jarillo-Herrero

Roland Kawakami
Philip Kim
Harold Kroto
Brian LeRoy
Allan MacDonald
Nadya Mason
Barbaros Oezylmaz
Marek Potemski
Jurgen Smet
Joseph Stroschio
Bart van Wees
Jun Zhu