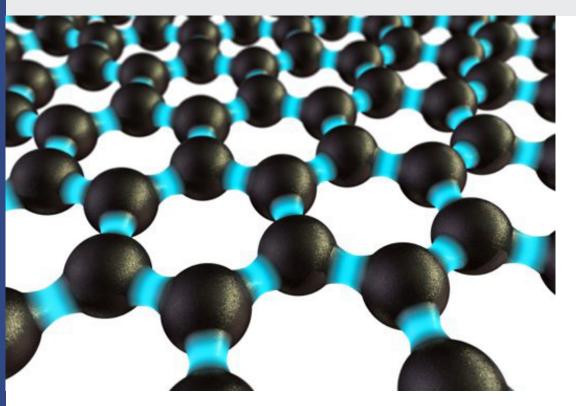
"The Relativistic World of Graphene"

GENERAL PHYSICS COLLOQUIUM



GORDON SEMENOFF

Dept. of Physics and Astronomy, The University of British Columbia, Vancouver, Canada

Thursday December 6 at 15.15 EULER lecture room

Coffee will be served from 14.45

Organizer:

GOTHENBURG PHYSICS CENTRE



Abstract

Graphene is a two-dimensional semimetal where the electron obeys an emergent relativistic Dirac equation. The resulting electronic properties of this substance make it both a fascinating case study in condensed matter physics and a promising new material for electronics technology. It also offers a novel testing ground for fundamental issues associated with the quantization of the relativistic particle, such as zitterbewegung and the Schwinger and Klein effects which have proven difficult to test in the particle physics world, but are visible in and have profound effects on the physics of graphene.

Questions, comments or suggestions on Physics Colloquium? apell@chalmers.se