



Appunti di Fisica '14 & Dottorato di Ricerca in Fisica

**13 febbraio ore 15:00
Sala seminari, CNR-IPCFC**

**Graphene and related materials:
from scotch tape to advanced production methods**

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Graphene as well as several graphene related materials like graphene oxides, porous graphenes and graphene quantum dots are currently attracting attention for potential applications in photovoltaics, catalysis and bio-related fields. Starting from some milestone experiments related to the discovery of new carbon allotropes, I intend to review some recent progresses in graphene research, in the development of production methods, and critically analyse the feasibility of various graphene applications.

The talk, divided into three main parts, will evidence the differences between top-down and bottom-up approaches, discussing advantages and limits. A particular attention will be given to discuss some laser assisted synthetic methods, including a few recent experiments in which the production of graphene quantum dots and porous graphene has been evidenced.

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