Institut für
Angewandte Mathematik

Leibniz
Universität
Hannover

Institut für Angewandte Mathematik
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Oberseminar
Analysis und Theoretische Physik

Dr. Manuel Friedrich
(Universität Wien)

Carbon geometries as optimal configurations

Carbon nanostructures are identified with configurations of atoms interacting via empirical potentials. The specific geometry of covalent bonding in carbon is phenomenologically described by the combination of an attractive-repulsive two-body interaction and a three-body bond-orientation part. In this talk we investigate the strict local minimality of specific carbon configurations under general assumptions on the interaction potentials and discuss the stability of graphene, some fullerenes, and nanotubes.
This is joint work with E. Mainini, P. Piovano, and U. Stefanelli.

Dienstag, 24. Januar 2017, 15:00 Uhr, Raum c311
Hauptgebäude der Universität

Über Ihren Besuch würden sich freuen:

Prof. Dr. Wolfram Bauer
Prof. Dr. Joachim Escher
Prof. Dr. Olaf Lechtenfeld
Prof. Dr. Elmar Schrohe
Prof. Dr. Christoph Walker
Prof. Dr. E. Wiedemann