Contribution ID: **654** Type: **Oral (Non-Student) / orale (non-étudiant)**

Molecular-dynamics simulations of two-dimensional Si nanostructures

Tuesday 16 June 2015 14:30 (15 minutes)

Nanostructed materials make it possible to tailor the vibrational properties of a system for specific uses like thermoelectric applications or phononic waveguides. In this work, the vibrational properties of two-dimensional silicon nanostructures are studied. The nanostructures are build from arrays of nanowires that are arranged in such a manner that they form a periodic lattice. The method of molecular-dynamics simulations is used to calculate the vibrational properties. Results will be shown for the vibrational density of states as well as dispersion relations at long wavelength.

Author: Dr MEYER, Ralf (Laurentian University)

Presenter: Dr MEYER, Ralf (Laurentian University)

Session Classification: T2-2 Condensed Matter Theory (DCMMP-DTP) / Théorie de la matière condensée (DPMCM-DPT)

Track Classification: Condensed Matter and Materials Physics / Physique de la matière condensée et matériaux (DCMMP-DPMCM)