



Giovedì 14 Settembre 2017  
alle ore 11.00

presso l'aula 2 dell'Edificio F  
Area della Ricerca CNR  
Via Madonna del Piano, 10 Sesto F.no (Firenze)

il **Prof. Yuko OKAMOTO**  
Department of Physics, School of Science, Nagoya University  
Japan

terrà il seguente seminario:

"Classical and quantum molecular simulations  
in generalized ensemble"

Dr. Giovanni La Penna  
Primo Ricercatore

Dr. Francesco Vizza  
Direttore

#### Abstract:

Conventional molecular simulations suffer from the multiple-minima problem where there are a huge number of local-minimum energy states in the system and the simulations tend to get trapped in some of these local-minimum states. In order to overcome this difficulty, we have been advocating the uses of the generalized-ensemble algorithms which perform random walks in potential energy and other physical quantities and their conjugate parameters. In this talk, I will give the latest results of our applications of generalized-ensemble algorithms to classical and quantum molecular simulations.

#### Biographic sketch:

<http://www.tb.phys.nagoya-u.ac.jp/~okamoto/index-e.shtml>