Contribution ID: **47** Type: **not specified**

Advances in the Hybrid Monte Carlo method for lattice QCD

Thursday 10 May 2012 11:30 (30 minutes)

Lattice QCD is a first-principle computational tool to describe the properties of hadron spectrum and decay modes, which allows for precision tests of the Standard Model. The algorithm of choice for lattice QCD simulations is known as the Hybrid Monte Carlo (HMC) algorithm. I am going to discuss recent algorithmic and implementation improvements which lead to a better scaling of the new highly optimized HMC packages, and some of the challenges ahead.

Primary author: MARINKOVIC, Marina (Humboldt University Berlin)

Presenter: MARINKOVIC, Marina (Humboldt University Berlin)