



Contribution ID: 312

Type: Oral Presentation

Structure of Few-Nucleon Systems Studied with the Extended Antisymmetrized Molecular Dynamics

Thursday, 14 July 2011 12:15 (15 minutes)

Ground-state properties of three-nucleon and four-nucleon systems are studied with the angular-momentum-projected and parity-projected antisymmetrized molecular dynamics. The Hamiltonian of the systems is constructed with semi-realistic nucleon-nucleon interactions. The results obtained for the ground-state energies, root-mean-square radii and magnetic dipole moments are compared with the findings of other theoretical methods.

**Level (Hons, MSc,
 PhD, other)?**

PhD

**Consider for a student
 award (Yes / No)?**

No

**Would you like to
 submit a short paper
 for the Conference
 Proceedings (Yes / No)?**

Yes

Primary author: Mr RAMPHO, Gaotsiwe Joel (University of South Africa)

Co-author: Prof. SOFIANOS, Sofianos A. (University of South Africa)

Presenter: Mr RAMPHO, Gaotsiwe Joel (University of South Africa)

Session Classification: Theoretical

Track Classification: Track G - Theoretical and Computational Physics