

Université Paris-Saclay
IJCLab
(Laboratoire de Physique des 2 Infinis Irène Joliot-Curie)
Bât. 100, F-91405 Orsay

Séminaire de Physique Nucléaire Théorique

Nuclear structure and reactions using lattice effective field theory

G. Rupak

*(Department of Physics and Astronomy, Mississippi State University,
USA)*

Effective field theory (EFT) formulated on a space-time lattice provides a model-independent framework for ab initio nuclear structure and reaction calculations. The EFT interactions are rooted in quantum chromodynamics through low energy symmetry constraints. In this talk I present several recent developments in lattice EFT. I present the so called adiabatic projection method that enables elastic and in-elastic reaction calculations. Bound state properties of atomic nuclei such as carbon and oxygen will also be presented.

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11 :30

IJCLab, Bât. 100, Salle Bâtiment 100, Salle A015