Université Paris-Saclay
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Séminaire de Physique Nucléaire Théorique

Nuclear structure and reactions using lattice effective field theory

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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
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