

# SÉMINAIRE du PÔLE THÉORIE



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### **Towards consistent nuclear interactions from chiral Lagrangians**

Low-energy nuclear structure and reactions can be described in a systematically improvable way using the framework of chiral EFT. This requires solving the quantum mechanical many-body problem with regularized nuclear forces and current operators, derived from the most general effective chiral Lagrangian. To maintain the chiral and gauge symmetries, a symmetry preserving cutoff regularization has to be employed when deriving nuclear potentials. I will present our recent work along this line, which opens an avenue for high-accuracy studies of chiral dynamics beyond the two-nucleon sector.

*Monday 15 January 2024, 14h00*  
*IJCLab, Build. 100, Room A018*