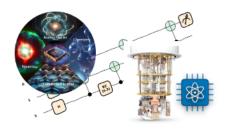
Advanced Quantum Algorithms for Many-body systems (AQAM-2025)



Contribution ID: 91 Type: not specified

Towards quantum simulations of nuclear reactions

Tuesday, November 18, 2025 9:30 AM (1 hour)

With the recent experimental realization of quantum computing devices containing tens to hundreds of qubits and fully controllable operations, the theoretical effort in designing efficient quantum algorithms for a variety of problems has seen a tremendous growth worldwide. In this talk I will discuss the prospects of describing nuclear reactions on digital quantum computers using a low energy effective interaction. I will in particular highlight recent progress in formulating these processes in first quantization.

Author: Prof. ROGGERO, Alessandro (University of Trento)

Presenter: Prof. ROGGERO, Alessandro (University of Trento)