



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.

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