



東北大学 宇宙創成物理学国際共同大学院プログラム

GP-PU (Graduate Program on Physics for the Universe) Seminar

# “Noise-resilient quantum simulation of nuclear dynamics”

by Sofia Quaglioni

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Time and Date : 9:30 - 11:00, Fri June 18<sup>th</sup> 2021

Abstract:

Quantum computing holds the promise of exact simulations of nuclear matter and dynamics. However, presently quantum simulations are limited by the buildup of environmental noise across multiple quantum logical gates. I will show how noise-resilient quantum simulations can be achieved by using a minimal number of gates, yielding a 100-fold increase in the quantum simulation time of two-neutron spin dynamics.

Zoom registration :

[https://us02web.zoom.us/meeting/register/tZUqdOuqrDwsG9RrO\\_u8UhFkXqLqADVBWpFe](https://us02web.zoom.us/meeting/register/tZUqdOuqrDwsG9RrO_u8UhFkXqLqADVBWpFe)

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