

BRICK and beyond: Bayesian analyses of low-energy 3He-4He data using R-matrix and Effective Field Theory

Tuesday 19 November 2024 15:10 (50 minutes)

I will report on an R-matrix analysis of the recent low-energy data set of Paneru et al., together with older low-energy data and capture data, that uses the Bayesian R-matrix Inference Code Kit (BRICK).

If time permits I will contrast the R-matrix analysis with ongoing work on the same reactions in an effective field theory that exploits the clustering in this system to develop a systematic expansion for the quantum-mechanical amplitudes.

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