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Three-body Bound state calculations

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Abstract content
 (Max 300 words)

We employ the three-dimensional differential Faddeev equations, with nucleon-nucleon semi-realistic potentials to obtain ground state binding energies of the 3H nucleus. To be solved numerically, these equations are first transformed into an eigenvalue equation via the orthogonal collocation procedure using triquintic Hermite splines. Second, the resulting eigenvalue equation is solved using the Restarted Arnoldi Algorithm.

Apply to be
 considered for a student
 award (Yes / No)?

yes

Level for award
 (Hons, MSc,
 PhD)?

PhD

Main supervisor (name and email)
and his / her institution

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Yes

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