

Abstract Submitted
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Ab-initio analysis of β -delayed proton emission in ^{11}Be ¹ MACK ATKINSON, PETR NAVRATIL, TRIUMF — The exotic β -delayed proton emission is calculated in ^{11}Be from first principles using chiral two- and three-nucleon forces. To investigate the unexpectedly large branching ratio measured in [PRL 123, 082501 (2019)] we calculate the proposed $1/2^+$ proton resonance in ^{11}B using the no-core shell model with continuum (NCSMC). This timely calculation helps to resolve whether this large branching ratio is caused by unknown dark decay modes or an unobserved proton resonance.

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