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## Analysis of four-body breakup reactions using Faddeev-Yakubovsky formalism

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### Abstract content <br> &nbsp; (Max 300 words)

Four-body breakup processes at astrophysical energies are crucial in understanding dynamical properties of weakly bound nuclei. In this work we calculate cross-sections for four-body reactions involving light nuclei such as  $^6\text{He}$  on heavy nuclei via the Faddeev-Yakubovsky formalism, as well as the astrophysical factor for the  $^7\text{Be}(p,\gamma)^8\text{B}$  accurately. The results obtained are in agreement with other competing methods and in good agreement with experimental data.

### Apply to be<br> consider for a student <br> &nbsp; award (Yes / No)?

No

### Would you like to <br> submit a short paper <br> for the Conference <br> Proceedings (Yes / No)?

Yes

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