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Two-body electrodisintegration of ⁴He with antisymmetrized molecular dynamics

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Abstract content
 (Max 300 words)

Proton knock-out process from the ⁴He nucleus using high-energy electrons is investigated. The wave functions of the systems are constructed in the antisymmetrized molecular dynamics approach. Final-state interactions are included using the Glauber multiple scattering approximation. Non-relativistic nuclear one-body charge and current operators are employed to calculate the nuclear transition amplitude. It is found that the antisymmetrized molecular dynamics approach generates a very good approximation to experimental data for the ⁴He nucleus.

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Primary author: Prof. RAMPHO, Gaotsiwe Joel (University of South Africa)

Co-authors: Prof. ORYU, Shinshu (Tokyo University of Science); Prof. SOFIANOS, Sofianos A. (University of

South Africa)

Presenter: Prof. RAMPHO, Gaotsiwe Joel (University of South Africa)

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