Microscopic description of elastic scattering with light exotic nuclei

The traditional CDCC method is extended to a microscopic variant, where the projectile is described by a many-body structure. This means that only neutron- and proton-target potentials are needed. The formalism has been first applied to the simple two-cluster 7Li projectile, and is now extended to three-cluster nuclei, such as 6He and 8B. The model provides an opportunity to investigate halo and breakup effects. Recent results, as well as future developments are presented.

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