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## Study of isospin equilibration in projectile fragmentation

Isospin transport is investigated with  $40,48\text{Ca}+40,48\text{Ca}$  reactions at 35 MeV/nucleon, measured with the coupling of the VAMOS high acceptance spectrometer and the INDRA charged particle multidetector.

Using the projectile remnant detected with VAMOS and carefully selected light-charged-particles measured in coincidence with INDRA, a reconstruction method is applied to estimate the excited quasi-projectile (QP) on an event-by-event basis.

Isospin diffusion is investigated using the isospin transport ratio with the asymmetry  $\delta=(N-Z)/A$  of the projectile remnant as an isospin-sensitive observable and the total transverse energy of  $Z\leq 2$  nuclei for experimental centrality sorting. A method for estimating the impact parameter distributions, adapted from ultra-relativistic heavy ion collisions, is also applied to improve the pertinence of comparisons with transport model calculations.

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