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In-medium nucleon-nucleon scattering in reactions with rare isotopes CARLOS BERTULANI, Texas A&M University-Commerce, K. OGATA, Kyushu University — Relativistic effects in the breakup of weakly-bound nuclei at intermediate energies are studied and compared with non-relativistic calculations. We show that relativistic corrections lead to larger breakup cross sections. Since many of these reactions can only be treated correctly if one accounts for the coupling between states in the continuum, we show that continuum-discretized coupled-channels calculations will also be strongly influenced by relativistic effects.

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