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Abstract for an Invited Paper
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Nuclear Astrophysics and Rare Isotopes¹

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A new generation of rare isotope facilities will help define the nuclear physics of exotic astrophysical environments. The data – nuclear masses and weak rates – will reduce the microphysics uncertainties in astrophysical models, helping modelers gain better control over other parameters. I discuss several examples, with special emphasis on the r-process, where quantities of interest include the freezeout radius, dynamic timescale, and flavor physics affecting the ejecta of core-collapse supernovae.

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