

r-Process Sites and their Imprint in Galactic Chemical Evolution

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From low metallicity stars and the presence of radioactive isotopes in deep-sea sediments we know that the main r-process, producing the heaviest elements, is a rare event. The question remains whether neutron star mergers, via GW170817 the only proven r-process site, are the only contributors. Early galactic evolution as well as variations in nucleosynthesis signatures, e.g. actinide boost stars, might indicate the need for other sites. We discuss and present the possible options.