

Nuclear Reactions on Unstable Nuclei in Astrophysics

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Nuclear reaction rates play an important role in many astrophysical scenarios. Under extreme conditions these reactions occur on unstable nuclei posing a particular challenge for experimentalists and theorists. I will give an overview of the relevant astrophysical scenarios, their current open questions, and the role of nuclear reactions. Results from experiments at NSCL to clarify the nuclear structure in order to calculate reaction rates will also be discussed.