

国立研究開発法人理化学研究所 仁科加速器研究センター 第268回 RIBF核物理セミナー RIKEN Nishina Center for Accelerator Based Science The 268th RIBF Nuclear Physics Seminar

R-process and kilonova

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Since the discovery of the kilonova associated with a gravitational source, GW170817, neutron star mergers are recognized to be the astrophysical site of the r-process. A merger of two neutron stars gives rise to an ejection of material made of radioactive heavy nuclei that become the heating source to power a kilonova. Therefore, a reliable prediction of abundance distribution in merger ejecta will be crucial in the coming years. I will discuss which are the key radioactive nuclei as well as what are the key nuclear ingredients in the era of multi-messenger astronomy.

Ref. Wanajo 2018, ApJ, 868, 65

Mar.12th(Tue.)2019 13:30~ Nishina Hall, Nishina bldg., RIKEN * The talk will be given in English language. *Contact: Nuclear Physics Seminar Organizing Committee npsoc@ribf.riken.jp http://ribf.riken.jp/~seminar/*