

— 第957回九大原子核セミナー —

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演題：中性子星周りでの爆発的重元素合成機構の解明に向けて
(Experimental Challenge to Heavy Element Synthesis under Explosive Burning on Neutron Stars)

日時：10月17日(木) 16:30～

† 今回は通常と時間が異なりますのでご注意ください。

場所：九州大学伊都キャンパス
ウエスト1号館2階 B-212号室 (W1-B-212)

概要

Neutron stars are now considered to be very active, and interesting objects for physics and astronomy. Especially for nuclear astrophysics to understand the mechanism, nuclear physics for nuclear matter and the nucleosynthesis are the key subjects. The nucleosynthesis taking place around neutron star (or neutron stars) in a binary system require us to work on all over the N-Z plane of nuclear chart including the region still difficult to approach for explosive nuclear burnings. The kilo-nova observation in a binary neutron star merger gave us a chance to learn the r-process way up to super heavy element region in very neutron-rich side, and the X-ray burst in a binary system of a neutron star and a main sequence star ask us to learn nuclear physics of the rp-process way up to mass 110 region in neutron-deficient side. I will first discuss the basic understanding and the problem of the r-process and the rp-process, and then discuss our current, experimental challenges to study the two processes in nuclear physics, being made in RIBF in Japan and HIRF in China.

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