



独立行政法人理化学研究所 仁科加速器研究センター
第142回RIBF核物理セミナー

RIKEN Nishina Center for Accelerator Based Science
The 142nd RIBF Nuclear Physics Seminar

Current Status of r-process studies in Core-Collapse Supernovae Explosions

Dr. Nobuya Nishimura
(University of Basel, Switzerland)

The problem of astrophysical site(s) for the r-process is still shrouded in mystery despite more than a half century of studies. Although neutrino driven winds have been considered to be the most likely success, recent supernova simulations show that it is seriously difficult to achieve suitable conditions for r-process in the environment.

I will talk about new ideas for the r-process astronomical sites. I will show the results of r-process nucleosynthesis based on the core-collapse supernova scenario via the Quark-hadron phase transition during the early post-bounce phase. In addition, I also want to briefly remark the progress and preliminary results of r-process studies for magnetically driven core-collapse supernovae.

June. 5(Tue), 2012 15:30~
RIBF Hall, RIKEN

Contact: Nuclear Physics Seminar Organizing Committee
npsoc@ribf.riken.jp
<http://ribf.riken.jp/~seminar/>