



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202回 RIBF核物理セミナー

RIKEN Nishina Center for Accelerator Based Science  
The 202<sup>nd</sup> RIBF Nuclear Physics Seminar

## マルチメッセンジャーで紐解く超新星爆発の物理

Probing Core-Collapse Supernova Physics with Multi-Messenger Observations

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After we summarize a recent status of core-collapse supernova models, we report our recent results based on two-(2D) and three-dimensional (3D) radiation-hydrodynamics simulations. We also talk about signals of neutrinos and gravitational waves expected from the self-consistent models, which would be important to extract the information of the central engine from the multi-messenger observations. We also report our code development where 3D general-relativistic hydrodynamics is now meeting with spectral neutrino transport and also with detailed weak interaction rates.

\* The talk will be given in English language..

June 23 (Tue.) 2015 13:30 ~  
RIBF Hall (rm.201), RIBF bldg., RIKEN

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