RIKEN NISHINA CENTER

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87回 月例コロキウム
RIKEN Nishina Center for Accelerator Based Science
The 87th Monthly Colloquium

Stellar Evolution and Nucleosynthesis in Massive Stars

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(Kyushu University)

Presupernova models and nucleosynthesis in massive stars are reviewed in the context of supernovae. Evolutionary models of massive stars toward the onset of collapse for the stellar mass of M≧10M⊙ in the main-sequence stage are presented. It is stressed that silicon shell burning is important to determine the final size of the iron core. As the result, we obtain the iron core mass ranges from 1.2 to 1.9 M⊙ for 13-70 M⊙ stars. As for nucleosynthesis, the s-process during core helium
burning and p-process in the subsequent burning stage are presented in detail. The r-process during supernova explosion is discussed.

Oct.17th (Wed.) 13:30- at Nishina Hall
２０１８年10月17日（水）１３:30 -
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