



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211回 RIBF核物理セミナー

RIKEN Nishina Center for Accelerator Based Science  
The 211<sup>th</sup> RIBF Nuclear Physics Seminar

## Tensor optimized antisymmetrized molecular dynamics (TOAMD)

Prof. Hiroshi Toki (Professor emeritus, RCNP Theory Group)

It is important to describe nuclei and nuclear matter using the nucleon-nucleon interaction. The main difficulty was the treatment of the strong tensor interaction caused by the pion exchange, which introduces high momentum components and strong spin correlations. We have developed TOAMD to treat the tensor interaction, which is able to treat two, three and higher order terms caused by the strong tensor interaction. We present numerical results and highlight the important roles of the tensor interaction on the structure of finite nuclei and nuclear matter.

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

Dec. 11th (Fri.) 2015 13:30 ~  
RIBF Hall (rm.201), RIBF bldg., RIKEN

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