



独立行政法人理化学研究所 仁科加速器研究センター
第110回 RIBF核物理セミナー

RIKEN Nishina Center for Accelerator Based Science
The 110th RIBF Nuclear Physics Seminar

“Time-saving” theory for quantum simulation of superfluid nuclei

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Numerical simulation of nuclear collision dynamics using the TDHF theory has been extensively studied in the past. It is very successful to calculate the fusion cross sections, deep inelastic scattering, etc. However, the TDHF is not applicable to low-energy nuclear dynamics in which the pairing interaction plays an essential role. We have developed a method, which is an extension of the TDHF and computationally feasible.

In this talk, I will present the importance of the pairing in nuclei as an introduction, then our new canonical-basis formalism, applications, and future perspectives.

Dec. 27 (Mon), 2010 13:30-
RIBF Hall, RIKEN

The seminar will be given in English.

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