

独立行政法人理化学研究所 仁科加速器研究センター 第98回RIBF核物理セミナー RIKEN Nishina Center for Accelerator Based Science The 98th RIBF Nuclear Physics Seminar

## Skyrme density-functional approach to excitation modes in deformed neutron-rich nuclei

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We have developed a new framework of the linear response calculations for deformed neutron-rich nuclei based on nuclear density-functional theory. We present the moments of inertia of <sup>34</sup>Mg and <sup>36</sup>Mg using the Thouless-Valatin procedure, and show the applicability of our new calculation scheme not only for the vibrational modes but also for the rotational modes in neutron-rich nuclei. Coupling effects between the pairing and vibrational modes of neutrons are also discussed.

Apr. 13(Tue), 2010 13:30-RIBF Conf. Hall, RIKEN The seminar will be given in English. Contact: RIBF Nuclear Physics Seminar Organizer seminar@ribf.riken.jp http://ribf. riken.jp/~seminar