RCNP EXPERIMENT E309

PROPOSAL FOR EXPERIMENT AT RCNP

18 January 2005

TITLE: Investigation of the Giant Monopole Resonance in the Cadmium Isotopes

SPOKESPERSONS:

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EXPERIMENTAL GROUPS:

University of Notre Dame, USA - Research Center for Nuclear Physics, Japan - Konan University, Japan - Tohoku University, Japan - KVI, the Netherlands.

RUNNING TIME:

Total running time not including beam preparation	8 days

BEAM LINE: Grand Raiden

BEAM REQUIREMENTS:

Type of particle	^{4}He
Beam energy	400 MeV
Beam intensity	2 nA
Other requirements	beam must be halo-free
	highest stability over the running period is required

BUDGET:

Purchase of enriched targets	1,000,000

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SUMMARY OF THE PROPOSAL

We request beam time to measure the Giant Monopole Resonance (GMR) in the Cadmium isotopes. The primary aim behind these measurements is to confirm the very interesting results recently obtained in our investigation of the Sn isotopes.