Abstract Submitted
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**Ground-state magnetic-dipole moment of $^{37}$Ca***[1] K. MINAMISONO, A. J. MILLER, B. A. BROWN, J. WATKINS, NSCL/Department of Physics and Astronomy, MSU, A. KLOSE, Department of Chemistry, Augustana University, D. GARAND, C. SUMITHRARACHCHI, NSCL, MSU, J. D. HOLT, A. TEIGELHÖFER, TRIUMF, J. D. LANTIS, S. V. PINEDA, NSCL/Department of Chemistry, MSU, Y. LIU, Physics Division, ORNL, B. MAA$\beta$, W. NÖRTERSHÄUSER, D. M. ROSSI, F. SOMMER, Institut für Kernphysik, Technische Universität Darmstadt, A. SCHWENK, Institut für Kernphysik, Technische Universität Darmstadt/GSI/ Max-Plank-Institute für Kernphysik — The ground-state magnetic-dipole moment of $^{37}$Ca, which has one neutron add to $^{36}$Ca with the neutron number $N = 16$, was determined to probe the closed-shell nature of the $^{36}$Ca nucleus. The hyperfine spectrum of the D2 transition in $^{37}$Ca ion was measured using collinear laser spectroscopy technique at BECOLA at NSCL/MSU. The resulting magnetic moment was compared with the shell model and in-medium similarity renormalization group calculations. The details of experiment and results will be discussed.

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