Abstract Submitted
for the HAW09 Meeting of
The American Physical Society

Investigation of excited states in Pt isotopes: ^{188}Pt, ^{192}Pt, ^{194}Pt
G. ILIE, WNSL, Yale University, New Haven, CT 06520, USA, NIPNE, 76900 Bucharest, Romania , T. AHN, WNSL, D. BUCURESCU, NIPNE, R.J. CASPERSON, R.F. CASTEN, WNSL, R. CHEVRIER, D. MCCARTHY, WNSL, Univ. of Surrey, Guilford, GU27XH, UK, A. HEINZ, WNSL, S. HEINZE, IKP, Univ. of Koeln, D-50937 Koeln, Germany, R. HERTENBERGER, TUM, D-85748 Garching, Germany, D.A. MEYER, WNSL, Rhodes College, Memphis, Tennessee 38112, USA, D. MUCHER, P. PEJOVIC, C. SCHOLL, IKP, J.R. TERRY, V. WERNER, R. WINKLER, WNSL, H.-F. WIRTH, TUM — The Pt isotopic chain is located in a transitional region between well-deformed rare-earth and the spherical nuclei near the doubly-magic ^{208}Pb. They are known to exhibit a range of interesting structural phenomena. Platinum isotopes, ^{188}Pt, ^{192}Pt and ^{194}Pt, were investigated in different reactions. Excited states in ^{188}Pt were populated in β-decay and studied through off-beam γ-ray spectroscopy. The energies and decay properties of the low-lying levels were measured. A (p, t) experiment was performed to study ^{192}Pt and ^{194}Pt. The (p, t) reactions are particularly sensitive to 0^+ excited states. The purpose of these studies is to obtain information which can help to discriminate between alternative structural interpretations. Results of this work will be presented. Research was supported by the U.S. DOE under Grant No. DE-FG02-91ER-40609, MLL, and DFG (C4-Gr894/2-3, Jo391/2-3).

Gabriela Ilie
WNSL, Yale University, New Haven, CT 06520, USA

Date submitted: 01 Jul 2009 Electronic form version 1.4