Abstract Submitted
for the HAW09 Meeting of
The American Physical Society

Lifetime measurements of the yrast band states of ^{184}Pt and ^{186}Pt DAVID MCCARTHY, WNSL, Yale University, New Haven, CT 06511, USA, VOLKER WERNER, J. RUSSELL TERRY, WNSL, ZVI BERANT, Nuclear Research Center Negev, Beer-Sheva, 84190 Israel, ROBERT CASPERSON, ANDREAS HEINZ, WNSL, GREG HENNING, Department of Physics, ENS de Cachan, 94230 Cachan, France, JING QIAN, ELIZABETH WILLIAMS, RYAN WINKLER, WNSL — Recoil distance Doppler-shifted data was taken in a plunger experiment investigating ^{184}Pt and ^{186}Pt. Lifetime measurements were made of yrast states ranging in spin from 4^+ to 12^+ in those nuclei using the differential decay curve method. Reduced transition strengths were calculated. This data was examined in the context of the Interacting Boson Approximation (IBA) model which has been found to give good predictions for both energy levels and branching ratios for nuclei in this region. A strong agreement with IBA predictions was found in the B(E2)s for ^{184}Pt though the results seen in ^{186}Pt, where lifetimes had not previously been measured, could not be said to be in similar agreement and require further interpretation.

David McCarthy
WNSL, Yale University, New Haven, CT 06511, USA

Date submitted: 29 Jun 2009 Electronic form version 1.4