Abstract Submitted for the DNP07 Meeting of The American Physical Society

High-spin states in 88 Kr N. FOTIADES, LANL, A.F. LISETSKIY, Arizona Univ., J.A. CIZEWSKI, Rutgers Univ., R. KRÜCKEN, T.U.München, R.M. CLARK, P. FALLON, I.Y. LEE, A.O. MACCHIAVELLI, LBNL, J.A. BECKER, W. YOUNES, LLNL — High-spin states in 88 Kr have been studied following the fission of the 226 Th compound nucleus formed in a fusion-evaporation reaction (18 O at 91 MeV on 208 Pb). The Gammasphere array was used to detect γ-ray coincidences. High-spin states up to spin (14) and 8 MeV excitation energy have been established. The level scheme reported for 88 Kr in the spontaneous fission of 248 Cm [1] has been enriched and extended to higher spin and excitation energies. Differences between the level scheme reported in [1] and that obtained in the present work will be discussed. The observed experimental states are also compared with theoretical shell-model and interacting-boson-model-2 calculations. This work has been supported by the U.S. Department of Energy under Contracts No. DE-AC52-06NA25396 (LANL), W-7405-ENG-48 (LLNL) and AC03-76SF00098 (LBNL) and by the National Science Foundation (Rutgers).

[1] T. Rząca-Urban et al., Eur. Phys. J. A 9, 165 (2000).

Walid Younes LLNL

Date submitted: 28 Jun 2007 Electronic form version 1.4