

Abstract Submitted  
for the SES15 Meeting of  
The American Physical Society

**New analysis of levels in  $^{103}\text{Mo}$**  H.L. FRYMAN-SINKHORN, Eastern Kentucky University, E.H. WANG, C.J. ZACHARY, J.H. HAMILTON, A.V. RAMAYYA, Y.X. LUO, Vanderbilt University, J.O. RASMUSSEN, LBNL, S.J. ZHU, Tsinghua University — Excited states of  $^{103}\text{Mo}$  have been studied by analyzing high statistics  $\gamma$ - $\gamma$ - $\gamma$  and  $\gamma$ - $\gamma$ - $\gamma$ - $\gamma$  coincidence data from the spontaneous fission of  $^{252}\text{Cf}$  at Gammasphere. 23 new transitions and 12 new levels have been identified in this work. Spins and parities have been tentatively assigned based on systematics and their decay properties to the known levels. The newly identified band has been assigned as a one-phonon  $\gamma$  vibrational band by comparing the energy level spacings and transition energies with those of  $^{104,105}\text{Mo}$  which imply triaxial deformation in  $^{103}\text{Mo}$ . A comparison of levels in  $^{103}\text{Mo}$  with those in  $^{104,105}\text{Mo}$  will be presented. \*This work was performed while H.L. FRYMAN-SINKHORN was a Research Experience for Undergraduate participant at Vanderbilt University.

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Date submitted: 02 Oct 2015

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