## Abstract Submitted for the SES14 Meeting of The American Physical Society

New Levels of <sup>157</sup>Pm<sup>1</sup> J. RANGER, Furman University, Vanderbilt University, E.H. WANG, J.H. HAMILTON, A.V. RAMAYYA, J.K. HWANG, Vanderbilt University, A. NAVIN, M. REJMUND, A. LEMASSON, S. BHAT-TACHARYYA, GANIL, Y.X. LUO, J.O. RASMUSSEN, LBNL, S.J. ZHU, Tsinghua University, G.M. TER-AKOPIAN, YU. OGANESSIAN, JINR — Gamma rays in coincidence with isotopically-identified fission fragments using VAMOS++ and EX-OGAM, produced using <sup>238</sup>U on a <sup>9</sup>Be target, at an energy near the Coulomb barrier have been observed [1,2]. In the present work, we have combined data from the inbeam mass- and Z-gated spectra with the  $\gamma$ - $\gamma$ - $\gamma$ - $\gamma$  data from <sup>252</sup>Cf (SF) to assign transitions and levels in <sup>157</sup>Pm. In contrast to [3], the transitions previously assigned to <sup>156</sup>Pm are all seen in the M-Z gated spectra of <sup>157</sup>Pm and are not seen in the M-Z gated spectra of <sup>156</sup>Pm. The new expanded levels of <sup>157</sup>Pm are remarkably similar to those of the levels in <sup>155</sup>Pm, which have been assigned as a well-deformed rotational band built on  $\pi$  5/2 [532], as in <sup>155</sup>Pm.

<sup>1</sup>Vanderbilt University Physics and Astronomy REU Program

James Ranger Furman University

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