

Abstract Submitted
for the DNP07 Meeting of
The American Physical Society

Enhanced lifetime measurement of low-lying states in ^{66}Ge and ^{68}Ge ¹ ROBERT LUETTKE, Yale University / TU Darmstadt, ELIZABETH RICARD-MCCUTCHAN, VOLKER WERNER, HO-CHIANG AI, ROBERT CASPERSON, RICHARD CASTEN, ANDREAS HEINZ, JING QIAN, Yale University, BABAK SHORAKA, Yale University / University of Surrey, RUSS TERRY, ELIZABETH WILLIAMS, RYAN WINKLER, Yale University — Lifetimes in the $Z=N+2$ nucleus ^{66}Ge and its neighbor ^{68}Ge have been measured after a fusion evaporation reaction at the Wright Nuclear Structure Laboratory at Yale University, using the New Yale Plunger Device in the SPEEDY array. ^{66}Ge was produced through the reaction $^{58}\text{Ni}(^{10}\text{B}, 2\text{np})^{66}\text{Ge}$ at $E_{^{10}\text{B}}=28$ MeV, and ^{68}Ge through $^{58}\text{Ni}(^{12}\text{C}, 2\text{p})^{68}\text{Ge}$ at $E_{^{12}\text{C}}=38$ MeV. Techniques used include gamma-gamma-coincidences and the recoil distance method. By comparing both nuclei, the evolution along the neutron-axis away from $N=Z$ will be discussed.

¹This work was supported by US DOE grant no. DE-FG02-91ER-40609

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Date submitted: 02 Jul 2007

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