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Research Publications

As a Theorist

- [1] Y. Saito, I. Dillmann, R. Krücken, M. R. Mumpower, R. Surman, "Uncertainty Quantification of Mass Models using Ensemble Bayesian Model Averaging", Phys. Rev. C 109, 054301 (2024).
- [2] G. G. Kiss, A. Vitéz-Sveiczer, Y. Saito, et al., "Measuring the β-decay Properties of Neutron-rich Exotic Pm, Sm, Eu, and Gd Isotopes to Constrain the Nucleosynthesis Yields in the Rare-earth Region", ApJ 936, 107 (2022).
- [3] H. Schatz, A. D. B. Reyes, et al., "Horizons: nuclear astrophysics in the 2020s and beyond", Journal of Physics G: Nuclear and Particle Physics 49, 110502 (2022).

As an Experimentalist

- [1] R. S. Lubna, A. B. Garnsworthy, V. Tripathi, et al., "Cross-shell excited configurations in the structure of ³⁴Si", Phys. Rev. C 109, 014309
 (2024).
- [2] R. Yokoyama, R. Grzywacz, B. C. Rasco, et al., " β -delayed neutron emissions from N > 50 gallium isotopes", Phys. Rev. C 108, 064307 (2023).
- [3] D. Yates, R. Krücken, I. Dillmann, et al., "Decay spectroscopy of 160 Eu: Quasiparticle configurations of excited states and structure of $K^{\pi}=4^+$ bandheads in 160 Gd", Phys. Rev. C 107, 064309 (2023).
- [4] G. Lotay, J. Henderson, W. Catford, et al., "Single neutron transfer on ²³Ne and its relevance for the pathway of nucleosynthesis in astrophysical X-ray bursts", PLB 833, 137361 (2022).
- [5] S. A. Gillespie, J. Henderson, K. Abrahams, et al., "Coulomb excitation of 80,82 Kr and a change in structure approaching N=Z=40", PRC 104, 044313 (2021).
- [6] K. Wimmer, F. Recchia, S. M. Lenzi, et al., "Isomeric states in neutron-rich nuclei near N = 40",

Phys. Rev. C **104**, 014304 (2021).

- [7] A. D. MacLean, A. T. Laffoley, C. E. Svensson, et al., "High-precision branching ratio measurement and spin assignment implications for ⁶²Ga superallowed β decay", PRC 102, 054325 (2020).
- [8] Y. Saito, I. Dillmann, R. Krücken, et al. (GRIFFIN collaboration), "Decay spectroscopy of ¹²⁹Cd", PRC 102, 024337 (2020).
- [9] Y. Ayyad, B. Olaizola, W. Mittig, et al., "Direct Observation of Proton Emission in ¹¹Be", PRL 123, 082501 (2019).
- [10] A. Garnsworthy, C. Svensson, M. Bowry, et al., "The GRIFFIN facility for decay-spectroscopy studies at TRIUMF-ISAC", NIM A 918, 9-29 (2019).
- [11] B. Olaizola, A. B. Garnsworthy, F. A. Ali, et al., "Shape coexistence in the neutron-deficient lead region: A systematic study of lifetimes in the even-even ¹⁸⁸⁻²⁰⁰Hg with the GRIFFIN spectrometer at TRIUMF", PRC 100, 024301 (2019).
- [12] A. Tolosa-Delgado, J. Agramunt, J. Tain, et al., "Commissioning of the BRIKEN detector for the measurement of very exotic β-delayed neutron emitters", NIM A 925, 133-147 (2019).
- [13] J. Williams, C. Andreoiu, G. Ball, et al., "The CsI ball ancillary detector array for TIP and TIGRESS at TRIUMF", NIM A 939, 1-9 (2019).
- [14] K. Wimmer, F. Recchia, S. Lenzi, et al., "First spectroscopy of 61 Ti and the transition to the Island of Inversion at N=40", PLB **792**, 16-20 (2019).
- [15] R. Yokoyama, R. Grzywacz, B. C. Rasco, et al., "Strong one-neutron emission from two-neutron unbound states in β decays of the r-process nuclei ^{86,87}Ga", PRC 100, 031302 (2019).
- [16] M. R. Dunlop, C. E. Svensson, G. C. Ball, et al., "High-precision half-life measurement for the superallowed Fermi β^+ emitter 22 Mg", PRC 96, 045502 (2017).
- [17] A. Tarifeño-Saldivia, J. Tain, C. Domingo-Pardo, et al.,

"Conceptual design of a hybrid neutron-gamma detector for study of β -delayed neutrons at the RIB facility of RIKEN", JINST 12, P04006-P04006 (2017).