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Nuclear Masses: Sharing, Visualization, and Analysis Tools at nuclearmasses.org[1] M.S. SMITH, E.J. LINGERFELT, C.D. NESARAJA, ORNL, H. KOURA, JAEA, F.G. KONDEV, ANL — Nuclear masses form an essential ingredient in simulations of a variety of astrophysical environments and events – such as r-process nucleosynthesis in supernovae. While lab advances have led to a tremendous increase in the number and precision of new mass measurements, the dissemination of this information has many inadequacies. To address this impediment to progress, we have built an online, dedicated suite of codes that enables researchers to quickly and efficiently share, manage, visualize, access, manipulate, compare, and analyze nuclear mass datasets. Our system, freely available at **nuclearmasses.org**, is a platform-independent client-server application that accommodates the latest mass measurements, theoretical mass models, and large tables of evaluated nuclear masses. With our system, researchers can upload and store their mass datasets, share them with colleagues, quickly and easily visualize them in customizable 1D and 2D plots, and calculate and plot RMS differences. Our system provides an easy mechanism to distribute theoretical models, measurements, and review articles on nuclear masses.

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Michael Smith
ORNL

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