

Nuclear Data on Neutron-Rich Nuclei for Astrophysics *

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Thousands of neutron-rich nuclei are believed to be synthesized in supernova explosions. To simulate these cataclysmic explosions, a knowledge of the structure of, and reactions involving, neutron-rich nuclei are absolutely essential. While there are some existing datasets containing this information, most are based on theoretical calculations with little or no experimental benchmarks. To improve the situation, measurements are planned at a number of existing and future radioactive beam facilities. However, to ensure that the latest experimental work is effectively incorporated in astrophysics models, dedicated efforts in data compilation, evaluation, dissemination, and coordination are needed. A number of strategies to improve the utilization of nuclear data for astrophysics studies, including web-based dissemination tools, are presented. Two important new developments are a new web site to aid in locating available nuclear data sets, **www.nuastrodata.org**, and a visualization program with an easy-to-use graphical user interface to over 8000 reaction rates is available at this website.

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