

Abstract Submitted
for the DNP20 Meeting of
The American Physical Society

Status of the Atlas of Neutron Resonances¹ DAVID BROWN, GUSTAVO NOBRE, Brookhaven National Laboratory, GRIER SAYERS, Lock Haven University, SOPHIA HOLLICK, Yale University, PEDRO RODRIGUEZ, University of Puerto Rico, Mayaguez — The *Atlas of Neutron Resonances* is the most comprehensive compilation of neutron resonances, thermal cross sections, resonance integrals and Maxwellian averaged cross sections generally available. For decades, the *Atlas* was carefully curated and maintained by Dr. Said Mughabghab who sadly passed on during the summer of 2018 after publishing the 2018 edition of the *Atlas*. We are continuing the development of this important compendium. To a large extent, the *Atlas* book is generated from a series of text files given in a single purpose domain-specific format. Therefore we developed a software API and began the systematic assessment of the *Atlas* files. With this work past, we are now focusing on new efforts to expand the quality and scope of the *Atlas*. Current and recently completed projects include a cross comparison of the *Atlas* bibliography with Nuclear Science References and the EXFOR data library, a better determination of average resonance parameters, and using machine learning to assess the correctness of the spin group assignments of resonances tabulated in the *Atlas*.

¹This work was supported by the Nuclear Criticality Safety Program, funded and managed by the National Nuclear Security Administration for the United States Department of Energy. Brookhaven National Laboratory is sponsored by the Office of Nuclear Physics, Office of Science of the U.S. Department of Energy under Contract No. DE-AC02-98CH10886 with Brookhaven Science Associates.

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Date submitted: 30 Jun 2020

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