

Abstract Submitted  
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**Nuclear data made easily accessible through the Notre Dame Nuclear Database** TIMOTHY KHOUW, KEVIN LEE, PATRICK FASANO, MATTHEW MUMPOWER, ANI APRAHAMIAN, University of Notre Dame — In 1994, the NNDC revolutionized nuclear research by providing a colorful, clickable, searchable database over the internet. Over the last twenty years, web technology has evolved dramatically. Our project, the Notre Dame Nuclear Database, aims to provide a more comprehensive and broadly searchable interactive body of data. The database can be searched by an array of filters which includes metadata such as the facility where a measurement is made, the author(s), or date of publication for the datum of interest. The user interface takes full advantage of HTML, a web markup language, CSS (cascading style sheets to define the aesthetics of the website), and JavaScript, a language that can process complex data. A command-line interface is supported that interacts with the database directly on a user's local machine which provides single command access to data. This is possible through the use of a standardized API (application programming interface) that relies upon well-defined filtering variables to produce customized search results. We offer an innovative chart of nuclides utilizing scalable vector graphics (SVG) to deliver users an unsurpassed level of interactivity supported on all computers and mobile devices. We will present a functional demo of our database at the conference.

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