

Abstract Submitted
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Leadership Class Configuration Interaction Code - Status and Opportunities¹ JAMES VARY, Iowa State University — With support from SciDAC-UNEDF (www.unedf.org) nuclear theorists have developed and are continuously improving a Leadership Class Configuration Interaction Code (LCCI) for forefront nuclear structure calculations. The aim of this project is to make state-of-the-art nuclear structure tools available to the entire community of researchers including graduate students. The project includes codes such as NuShellX, MFDn and BIGSTICK that run a range of computers from laptops to leadership class supercomputers. Codes, scripts, test cases and documentation have been assembled, are under continuous development and are scheduled for release to the entire research community in November 2011. A covering script that accesses the appropriate code and supporting files is under development. In addition, a Data Base Management System (DBMS) that records key information from large production runs and archived results of those runs has been developed (<http://nuclear.physics.iastate.edu/info/>) and will be released. Following an outline of the project, the code structure, capabilities, the DBMS and current efforts, I will suggest a path forward that would benefit greatly from a significant partnership between researchers who use the codes, code developers and the National Nuclear Data efforts.

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