

NUCLEAR STRUCTURE DATABASE DEVELOPMENT

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We have set up a FTP/www server site on the ORNL Physics Division local area-network for compilation and distribution of nuclear-structure data. The data on this site are in the "RadWare Graphical Level Scheme" format, which is very widely used by the international reaction gamma/nuclear structure community. Members of this community are being encouraged not only to make use of this service, but also to contribute their own data by anonymous FTP. Contributed data use the same format, accompanied by additional information describing, for example, the experiment(s) that generated the level scheme, the names and institutions of the researchers involved, and references to any publications of the data. Contributed data will not be evaluated in any formal way, but simply checked for internal consistency.

The response to the site in terms of the number of contributed level schemes has been somewhat limited. It is hoped that efforts to publicize the service and to encourage RadWare users to submit their schemes will increase the activity. Efforts in this area are being coordinated with those of other centers to begin a compilation of non-evaluated nuclear structure data from recent publications.

A selection of RadWare-format level schemes created from ENSDF files, by means of a conversion program, have also been placed on the site with the intent of generating a displayed level scheme. The response of RadWare users (nuclear structure experimentalists) has been very encouraging. Extensions to the RadWare format to allow greater compatibility with ENSDF-type data are in progress.

On-line conversion of selected data sets from ENSDF-format to RadWare format is also developed, with the aim of using this method to replace the present archive of ENSDF-converted schemes.

The RadWare software for data analysis is also available to users. Documentation for Radware is given at <http://radware.phy.ornl.gov>.