New Developments in TalysLib Library

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Two years ago the first report about TalysLib was made on ISINN-28 [1]. Since that moment a lot of new features were added. The main direction of work was implementation of the interfaces to EXFOR and ENDF databases. To do that we have analysed existed tabulated experimental data formats C4 [2] and EXFORTABLES [3] and found advantages and disadvantages of these data sets. Interaction with evaluated data bases in ENDF-VI [4] format was partially implemented for total, elastic and inelastic data.

Another direction of library development is a web-interface creation. Implemented testing version of the web-interface is based on the Flask [5] Python library and realizes optical model parameters changing and plotting of the calculation results.

In the proposed report results of the experimental data sources analysis as well as discussion about implementation of the interaction with the evaluated data library and web-interface development will be presented.

1. N.A. Fedorov, I.D. Dashkov, T.Yu Tretyakova et al., TalysLib: a ROOT-based library for TALYS integration in data processing. ISINN-28, Book of abstracts.
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3. A. Koning. EXFORTABLES-1.0. IAEA NDS Document Series IAEA(NDS)-235, 2020
4. A. Trkov, M. Herman, D. A. Brown. ENDF-6 Formats Manual, National Nuclear Data Center, Brookhaven National Laboratory, 2018.
5. M. Grinberg. *Flask web development: developing web applications with python.* Reilly Media, Inc, 2018.