

Recent Activities Related to Nuclear Data Evaluation and Calculations in China

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The updated version of Chinese evaluated nuclear data library (CENDL-3.1) and China nuclear data evaluation activities will be briefly introduced. Attention is paid to the recent progress in the nuclear reaction model, including the emission mechanism of unstable ^5He nuclei, developed for light nuclei nuclear data evaluation. Also the following recent studies in nuclear model calculations will be briefly described: (1) nucleus–nucleus microscopic optical potential and applications in the analyzing elastic angular distribution for stable or unstable composite projectile; (2) CDCC approach and comparison with optical model calculation using global potential for deuteron incident on a variety of target masses; (3) folding model with a method of calculating one body density matrix, as well as the application in analyzing elastic scattering data from nucleon- nucleus, or nucleus-nucleus reactions.