

Nuclear structure input for nuclear reactions

Mihai Horoi

Central Michigan University, Mount Pleasant, Michigan 48859, USA

Nuclear reactions studies with radioactive isotopes require knowledge of the relevant nuclear structure. The reverse argument is that information extracted from the nuclear reaction data can be used to test and further refine the nuclear structure theories and models. In my talk I will present three types of nuclear structure inputs that are very common at the interface between the nuclear structure community and the nuclear reaction community: spectroscopic factors, charge-exchange form factors, and nuclear level densities.