

"Neutron induced reactions at the n_TOF facility at CERN"

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Neutron induced reaction cross sections play an important role in a wide variety of research fields, ranging from stellar nucleosynthesis, symmetry breaking effects in compound nuclei, the investigation of nuclear level density studies, to applications of nuclear technology, including the transmutation of nuclear waste, accelerator driven systems and nuclear fuel cycle investigations.

The neutron time-of-flight facility n_TOF at CERN has a spallation neutron source driven by a pulsed 20~GeV/\$c\$ proton beam. The status of the facility, its instrumentation, and the ongoing experimental programme will be discussed.