

NUCLEAR REACTIONS AND NEUTRINOS IN SUPERNOVAE

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Nuclear and neutrino physics are important in developing Supernova models. The measurement of key cross sections among thousands of possible nuclear processes is vital to this end. A special attention must be given to the role of neutron induced reactions on both stable and unstable species during Supernova explosions. At the same time the role of low energy (lower than 10-100 MeV) neutrinos in this scenario is also of high importance.

In this paper we will discuss two aspects of these studies. First, experiments devoted to measuring

cross sections of neutron induced reactions both using direct and indirect techniques will be discussed and, second, the possibility to detect Supernova neutrinos by means of large volume detectors will be addressed.