## Special Nuclear Seminar

## Nuclear physics input for the p-process

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Tuesday, October 29 • 4 P.M. Room 124 Nieuwland Science Hall

The p-process is, next to the s- and r- process, one of the major nucleosynthesis processes that are responsible for production of elements beyond iron. In particular, it is responsible for production for the stable neutron deficient isotopes of elements between Se and He (the p-nuclei). The proper description of this process requires wide variety of nuclear reaction cross sections, which have not been measured to date. Here, an overview of the recent measurements of the cross sections for reactions relevant for the p-process will be shown. Additionally, preliminary results showing possible method of measuring (p,n) and (a,n) reactions using the total absorption detector (SuN) will be discussed and plans for future experiments related to the p-process will be discussed.