

Abstract Submitted
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Alpha-induced reactions in stellar burning¹ JOACHIM GOERRES,
University of Notre Dame — Alpha-induced reactions play an important role in a variety of astrophysical environments. They provide the neutron sources for the main s-process which takes place in highly convective AGB stars and for the weak process during core Helium burning in massive stars. In addition, alpha induced reactions on ^{15}O and ^{18}Ne provide a break-out from the CNO cycle which is important for the dynamics of explosive Hydrogen burning. To illuminate experimental difficulties in determining reaction rates results of recent and ongoing experiments will be presented and future developments at the Nuclear Structure Laboratory at Notre Dame will be discussed.

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