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Nucleosynthesis in Neutron Stars SAMINA MASOOD, University of Houston Clear Lake — We compute the rate of change in beta decay processes at extremely high densities of cores of neutron star. The rate of change in beta decay affects different type of nuclear processes which change the rate of synthesis of different elements in the core of star and have non-ignorable effects on the composition of stellar core. We estimate the changes in nucleosynthesis of stellar interior and relate it to the structural model of star and observational results.

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