

Abstract Submitted
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Modeling electron capture rates using charge-exchange data¹ LE-SHAWNA UHER, Arizona State University — I use an electron capture program created by the exchange group and the National Superconducting Cyclotron Laboratory to calculate the electron capture rates in stars with densities ρY_e , ranging from $\log(1 \times 10^9)$ g/cm³ to $\log(14 \times 10^9)$ g/cm³, using data gathered from charge-exchange reaction experiments. This will eventually be used in the creation of a publicly-available electron capture rate database. I have also written a program that optimizes the original program by automatically creating its initialization files.

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