

**TABLES OF REACTION RATES FOR NUCLEOSYNTHESIS
FOR
CHARGED PARTICLE, WEAK, AND NEUTRINO INTERACTIONS***
($Z \leq 44$)

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ABSTRACT

Stellar nuclear reaction rates (in $\text{cm}^3 \text{ mole}^{-1} \text{ s}^{-1}$) are tabulated for strong, electromagnetic, and weak interactions on light and intermediate mass nuclei (^1H to ^{134}Ru) for $T_9 = 0.03, 0.05, 0.1, 0.3, 0.5, 1.0, 1.5, 2.0, 2.5, 3.0, 4.0, 5.0, 7.0$, and 10.0 K ($T_9 = 10^9$ degrees Kelvin). Also given are the temperature dependent partition functions (G), and neutrino energy loss rates. New tables of charged and neutral current neutrino interaction cross sections and branching ratios are presented.

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