**Big bang nucleosynthesis revisited via Trojan Horse method measurements**

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Nuclear reaction rates are among the most important input for understanding primordial nucleosynthesis and, therefore, for a quantitative description of the early universe. An up-to-date compilation of direct cross-sections of $^{2}H(d,p)^{3}H$, $^{2}H(d,n)^{3}He$, $^{7}Li(p,\alpha)^{4}He$, and $^{3}He(d,p)^{4}He$, reactions is given. These are among the most uncertain cross-sections used and input for big bang nucleosynthesis calculations. Their measurements through the Trojan Horse method are also reviewed and compared with direct data. The reaction rates and the corresponding recommended errors in this work were used as input for primordial nucleosynthesis calculations to evaluate their impact on the $^{2}H$, $^{3,4}He$, and $^{7}Li$, primordial abundances, which are then compared with observations. The work has been published in Astrophysical Journal **786**, 112 (2014)**.**