

Abstract Submitted  
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**Update of Reaction Rates for Big Bang Nucleosynthesis**<sup>1</sup> JOHN FUQUA, CARLOS BERTULANI, Texas A&M University-Commerce — Big Bang Nucleosynthesis (BBN) is one of the most important evidences of the validity of the Standard Model in Cosmology. During the Big Bang the Universe evolved very rapidly and only the lightest nuclides (e.g., D,  $^3\text{He}$ ,  $^4\text{He}$ , and  $^7\text{Li}$ ) could be synthesized. The abundances of these nuclides are probes of the conditions of the Universe during the very early stages of its evolution. Sensitivity to the several physics inputs in the BBN have been investigated thoroughly in the past. An important recent development is the need to account for the effect of re-estimated reaction rates on the BBN. Here we will examine the effects of new methods for obtaining nuclear reactions used as input in BBN evolution codes.

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