

Abstract Submitted
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Heavy Sterile Neutrinos, Primordial Nucleosynthesis, and the Evolution of the Early Universe CHRISTEL SMITH, GEORGE FULLER, CHAD KISHIMOTO, University of California, San Diego, ALEXANDER KUSENKO, KALLIOPI PETRAKI, University of California, Los Angeles — We examine the effect on the evolution of the early universe and on the Big Bang Nucleosynthesis (BBN) process of massive sterile neutrinos (rest masses < 1 MeV) which mix in vacuum with ordinary active neutrinos. We find that light element BBN considerations can provide probes of this sector of neutrino physics which are complementary to or even extend those based on laboratory measurements.

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