Abstract Submitted for the DNP06 Meeting of The American Physical Society

Coherent Sterile Neutrino Production in the Early Universe CHAD KISHIMOTO, GEORGE FULLER, CHRISTEL SMITH, UC San Diego — We calculate the resonant production of sterile neutrinos from active neutrinos in the early universe when there is a significant net lepton number residing in active neutrino seas. We study feedback on this process from the expansion rate of the universe, and we find interesting implications for primordial nucleosynthesis and models of sterile neutrino dark matter.

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Date submitted: 30 Jun 2006 Electronic form version 1.4