

Abstract Submitted  
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**The matter-neutrino resonance around thick disks** MICHAEL DEATON<sup>1</sup>, North Carolina State University — We are studying neutrino flavor transformations in typical neutron star merger environments. Here a dominance of  $\bar{\nu}_e$  over  $\nu_e$  fluxes introduces transformation behaviors qualitatively different from those seen in supernovae. Discovered in thin disk models, the matter neutrino resonance (MNR) may behave differently around thick disks, or not appear at all. I'll present what we have learned about the MNR using a phenomenological model motivated by hydrodynamical simulations of post-merger disks.

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