

Abstract Submitted  
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**Strangeness-changing Rates and Hyperonic Bulk Viscosity in Neutron Star Mergers**<sup>1</sup> ALEXANDER HABER, MARK ALFORD, Washington University, St. Louis — In this talk we present a computation of the rates of strangeness-changing processes and the resultant bulk viscosity in matter at the densities and temperatures typical of neutron star mergers. We include processes where quarks move between baryons via meson exchange: these have generally been omitted in previous analyses but provide the dominant contribution to the rates of strangeness-changing processes and the bulk viscosity. The calculation of these rates is an essential step towards any calculation of dissipation mechanisms in hyperonic matter in mergers. As one application, we present the dissipation times for density oscillations at the frequencies seen in merger simulations.

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