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P2.018 **Neutrino flavor evolution in a binary neutron star merger remnant**

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We study neutrino flavor oscillations in the neutrino-driven wind from a binary neutron star merger remnant consisting of a hypermassive neutron star surrounded by an accretion disk. Binary neutron star mergers are of particular interest for studying heavy element nucleosynthesis, since they provide favorable conditions for radpid neutron captures (r-process) due to the huge neutron excess in their ejecta. In this environments neutrinos play a pivotal role in determining the neutron over baryon ratio, thus the nucleosynthesis outcome could be altered significantly if there is an efficient neutrino flavor conversion. In an emission model we perform numerical studies where neutrinos are followed from the accretion disk. We compute the flavor evolution by taking into account neutrino coherent forward elastic scattering off ordinary matter and neutrinos themselves. To this aim, we use cylindrical averages of hydrodynamical quantities obtained from a three-dimensional simulation. We review the role of the matter-neutrino resonance phenomenon, explore the trajectory dependence and comment on the possible impact on nucleosynthesis.