

# Effect of Neutrinos on Binary Neutron Star Thermodynamics

Andrea Endrizzi<sup>1</sup>

<sup>1</sup>*Theoretisch-Physikalisches Institut, Friedrich-Schiller University, Froebelstieg 1, D-07743 Jena, Germany*  
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I will present results of general relativistic hydrodynamic (GRHD) simulations of binary neutron star (BNS) mergers with a hybrid leakage-transport scheme for the neutrino treatment. I will give an overview of the matter dynamics and show the thermodynamic conditions of matter at which different neutrino species decouple from matter. I will describe the different schemes implemented to evaluate the optical depth of neutrinos from numerical relativity (NR) simulations and discuss the results.