Compact stars are born at the final stage of stellar evolution. They have masses typically 1.4 times that of our Sun and a radius of only 10 km. As a consequence of such a close packing, these stars are very dense.They were recently observed via gravitational waves emitted during the final moments of a collision of two such stars. In the aftermath of such a stellar merger, a post-merger object is formed which is much hotter than an ordinary neutron star. Theoretically, a merger of two stars can be described using general-relativistic hydrodynamics. So far, such simulations were mostly carried out assuming that the fluid is ideal, that is there is no dissipation. The objective of this project is to compute the transport coefficients characterizing the dissipation during binary neutron star mergers. We plan to study the electronic transport as well as transport of quarks in dense cores of such stars. This will shed light on the timescale over which dissipative processes work. We can then judge the importance of dissipation once these timescales are compared with the characteristic observational timescales involved in these spectacular astrophysical events.