A Discontinuous Galerkin Method for General Relativistic Hydrodynamics in thornado

We are developing a solver for the general relativistic hydrodynamics equations assuming a conformally-flat approximation, a discontinuous Galerkin (DG) method for spatial discretization, and an explicit strong-stability-preserving Runge-Kutta method for temporal discretization. The solver makes use of AMReX for parallel-capabilities. Our solver has been benchmarked against several challenging test-problems, and results from these problems will be presented, along with a discussion of the DG method and two limiters necessary for the high-order methods.