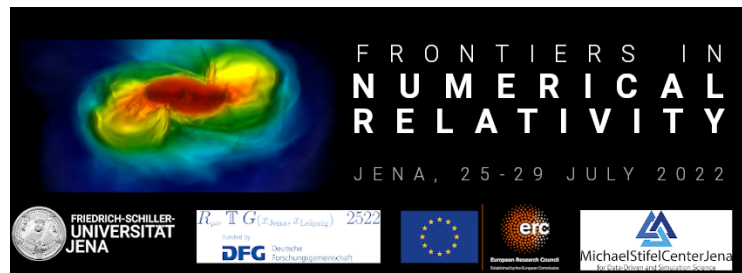


Frontiers in Numerical Relativity 2022 (FNR2022)



Contribution ID: 6

Type: **not specified**

Dual-Frame Generalized Harmonic Gauge on Hyperboloidal Slices

Monday, 25 July 2022 15:00 (45 minutes)

Both for studies of cosmic censorship and for practical purposes in gravitational wave astronomy, it is desirable to include future null-infinity in the computational domain. Extending formulations of general relativity known to behave well in the strong-field regime out to infinity with compactification is, however, a subtle game. In my presentation I will explain how the competition between decay of fields near infinity and growth of coefficients (due to compactification) plays out in dual-frame generalized harmonic gauge. I will discuss the numerical implementation of the resulting PDEs.

Presenter: Prof. HILDITCH, David (Instituto Superior Tecnico, Lisbon)

Session Classification: Invited talks