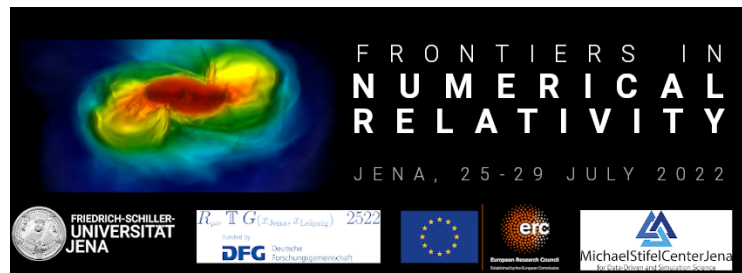


Frontiers in Numerical Relativity 2022 (FNR2022)



Contribution ID: 40

Type: not specified

Axisymmetric critical collapse on a shoestring

Tuesday, 26 July 2022 09:15 (15 minutes)

The study of vacuum critical collapse has acquired an aura of unapproachability in its 30 years of existence. It is often thought that only highly sophisticated numerical methods together with immense supercomputer clusters will suffice for treating this problem. In our recent work we refute this folk lore by using only open-source code running on single machines to discover universal echoing in near-critical axisymmetric vacuum spacetimes. In this talk we discuss the technical aspects of our work, focusing on the implementation of our “quasi-maximal” slicing condition and tuning it to make the most of our limited computing resources.

Presenter: KHIRNOV, Anton (Institute of Theoretical Physics, Charles University, Prague)

Session Classification: Short talks