## Sixteenth Marcel Grossmann Meeting



Contribution ID: 349

Type: Invited talk in the parallel session

## From Whisky to Spritz: Simulating Magnetized Binary Neutron Star Mergers

Friday, 9 July 2021 06:55 (25 minutes)

Magnetic fields play an important role in the dynamics of binary neutron star mergers and on their gravitational wave and electromagnetic emission (such as the production of relativistic jets and short gamma-ray bursts). In this talk I will review some of the main results in the field of fully general relativistic magnetohydrodynamic (GRMHD) simulations of these systems focusing in particular on a set of simulations performed with my WhiskyMHD code. I will also briefly discuss the open problems in this field and the need for more accurate GRMHD codes, such as the recently published Spritz code.

 Primary author:
 GIACOMAZZO, Bruno (University of Milano-Bicocca)

 Presenter:
 GIACOMAZZO, Bruno (University of Milano-Bicocca)

Session Classification: Explosive Events Associated with Compact-Object Binary Mergers

Track Classification: Binaries: Explosive events associated with compact-object binary mergers