RESEARCH TRAINING GROUP
Models of Gravity

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Fitting models for the EHT2017 observations

Abstract

The first observations from the EHT provide an unprecedented opportunity to constrain models for the supermassive black hole candidate at the center of M87 and for its environment. In this talk I will describe the pipeline used in the EHT collaboration for this purpose, from the creation of a library of general relativistic magnetohydrodynamic simulations and synthetic images to the techniques used to score their corresponding models. I will also present the results of applying this pipeline to GRMHD simulations of accretion onto two black hole mimickers, namely a gravastar and boson star.