

XV Black Holes Workshop



Contribution ID: 130

Type: **not specified**

R. Mishra: Radiative GRMHD simulations of black hole accretion with KORAL

Tuesday 20 December 2022 10:15 (15 minutes)

KORAL is a general relativistic radiation magnetohydrodynamics (GRRMHD) code used to study accretion onto compact objects and related phenomena. Radiation is treated using the M1 closure scheme. We present some examples of results obtained with KORAL in our group. We also discuss our ongoing project where we intend to set up a simulation of an optically thin and geometrically thick advection dominated accretion flow (ADAF), relevant for systems such as M87 and Sgr A. *These same initial astrophysical set up will then be evolved in different background space-time geometries. The aim of this work is to enable a determination by the Event Horizon Telescope (EHT) team of the space-time metric of the black holes observed in M87 and Sgr A.*

Session Classification: Session 5