

Contribution ID: 37

Type: **Talk**

GRMHD simulations of flaring black holes

Supermassive black holes reside in the center of galaxies and are characterised that not even light can escape their gravitational pull.

However, in their direct vicinity high-energies flares occur, particles are accelerated to highest energies and relativistic outflows are launched.

In order to understand these phenomena we perform GRMHD simulations of accreting black holes taking magnetic reconnection and turbulent

heating of the particles into account. From these simulations we compute radio images and broad-band spectra from the radio to the gamma-rays.

In the talk I will present recent results of these simulations and compare them to observations of galactic centre.

Primary author: Dr FROMM, Christian (Julius-Maximilians-Universität Würzburg - Institute of Theoretical Physics und Astrophysics - Chair of Astronomy)

Presenter: Dr FROMM, Christian (Julius-Maximilians-Universität Würzburg - Institute of Theoretical Physics und Astrophysics - Chair of Astronomy)

Session Classification: Session 1