TITL
E: Simulations of Optically Thick Accretion onto Black Holes – The

Power of Radiative Jets

SPEAKER: Olek Sadowski (MIT)

In this talk I will describe challenges of simulating thin and super-critical
accretion disks and present the numerical methods that allow for global
simulations in general relativity. I will then present in detail solutions for
disks accreting above the Eddington rate and show that the radiative jets
they produce can be very powerful even without any extraction of the black
hole rotational energy. In the end, I will show preliminary simulations of
disks with sub-Eddington accretion rates.