



Contribution ID : 5

Type : **Poster**

Making Reconnection Cooler: Modelling bright emission around black holes

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Accretion disks around black holes, such as those in active galactic nuclei and X-ray binaries, are home to extreme plasma processes that produce bright emission across the electromagnetic spectrum. One such process powering this emission is thought to be magnetic reconnection, the violent restructuring of the magnetic field topology in which magnetic field lines pinch apart and reconnect, converting stored magnetic energy into kinetic energy of the encompassing plasma. In particular, magnetic reconnection may be responsible for high-energy X-ray emission from a hot “corona” near the central black hole. In this talk, I will demonstrate how this emission is modelled computationally in relativistic magnetohydrodynamic simulations, as a step towards unlocking the theory behind these fascinating astrophysical environments.

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No

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Yes

What is your career level?

PhD

Which keyword describes the area of focus of this talk?

Black holes

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