Instituto de Astronomía Universidad Nacional Autónoma de México Sede Ensenada, Baja California, México

## Seminario de Investigación Extraordinario

JUEVES, 14 de Marzo de 2013 11:00 hrs, Auditorio IA-Ensenada

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HIGH-ENERGY FLARES FROM BLACK HOLES AND THE CHERENKOV TELESCOPE ARRAY



Accreting black holes in galactic binary systems are surrounded by a very hot and magnetised plasma. Fast and turbulent field reconnection can produce non-thermal gamma-ray flares in the magnetosphere when the system is in the hard-soft X-ray state. Radiation in the GeV range is mostly absorbed by the thermal photon field, but MeV and TeV signatures can be detectable. I present a model for the non-thermal emission of a strongly magnetised black hole corona and the predictions for forthcoming instruments like the Cherenkov Telescope Array (CTA) and MeV satellite-borne detectors.