## Suarez Estela

Probing Magnetic Fields during Black Hole Creation with the new X-ray Polarimeter

abstract: The POLAR instrument is a new polarimeter for hard X-rays and low energy gamma rays. Its main features are wide field of view, large modulation factor and big active surface. It will measure polarization of photons from transient sources like Gamma Ray Bursts and Magnetar Flares. For the first time it will be possible to probe magnetic fields structure during creation of the Black Holes and help answering the question of the true nature of GRB explosions.