

SES08-2008-020004

Abstract for an Invited Paper
for the SES08 Meeting of
the American Physical Society

Gamma-Ray Bursts and their jets

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Gamma-Ray Bursts are the brightest explosions in the present universe. We observe them as brief flashes of high-energy photons appearing randomly in the sky, followed by a tail of longer wavelengths emission lasting several months. They are associated to the final evolutionary stages of massive stars, and are thought to be powered by the formation of a black hole of several solar masses. I will review their properties and discuss the results of numerical simulations of their outflows, the role of magnetic fields and the nature of their spectral evolution.