



SEMINAIRE régulier du Service d'Astrophysique

GAMMA RAY BURSTS : RELATIVISTIC SOURCES AND COSMOLOGICAL TOOLS

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14h00

Gamma Ray Bursts are the most powerful sources in the Universe. They release up to 10^{55} erg as gamma ray photons within a few tenths of seconds. Their prompt and afterglow emission are the consequence of the final stages of the evolution of very massive stars. Their emission is observed at all wavelengths up to months after the burst detection. Their detection in the gamma ray band makes them observable up to very high redshifts. Therefore, they represent a unique tool to study the high redshift universe and can be used as a cosmological probe (complementary to SNIa and the CMB). Moreover, they could be candidate sites of acceleration of very high energy cosmic rays. The use of GRBs for cosmology is presented, the open issues and critics, recent results and future perspectives are discussed.



Un café sera servi 15 minutes avant le séminaire

Ce séminaire aura lieu au CEA Saclay – Orme des Merisiers –bâtiment 709, Salle 003.