L'Astrofisica dei Raggi Gamma

Francesco Longo
francesco.longo@ts.infn.it

In collaborazione con

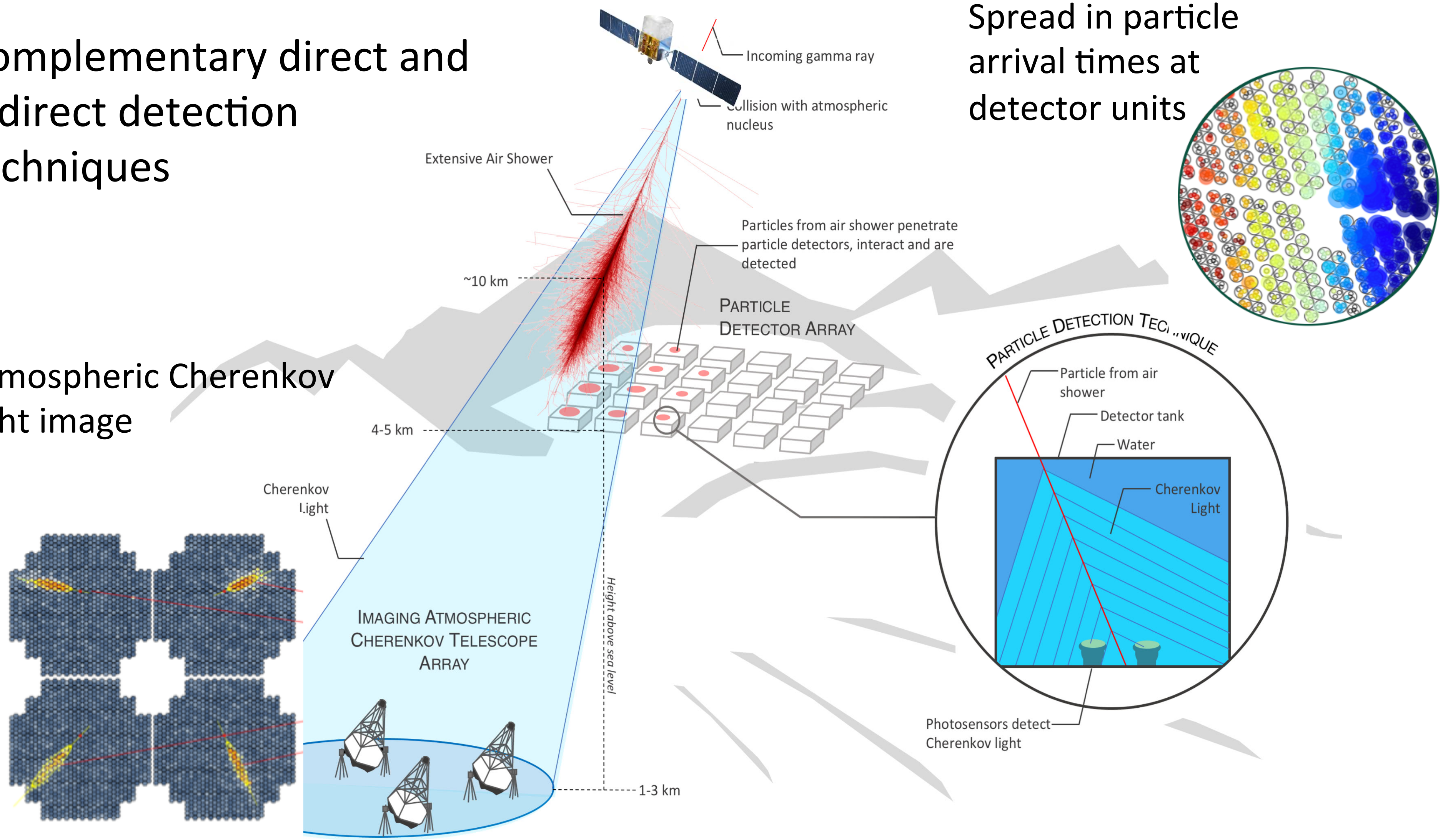
F.Matteucci, E.Orlando, G.Principe, B.Arsioli (UniTs)
G.Barbiellini (INFN)
B.De Lotto, D.Cauz, S.Ansoldi, M.Palatiello, I.Burelli, A.Vigliano (UniUd)
M.Persic, L.Nava (INAF)
A.Celotti (SISSA)

Astrofisica Gamma da Terra e dallo Spazio

Complementary direct and indirect detection techniques

Spread in particle arrival times at detector units

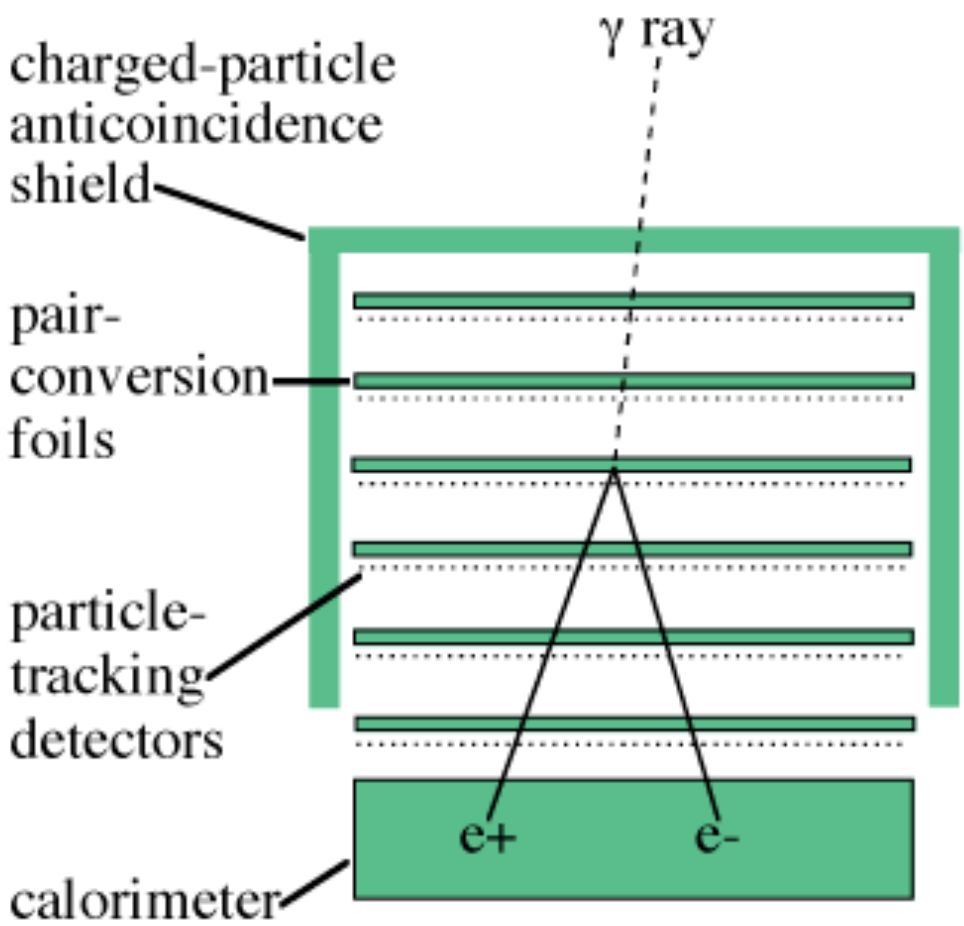
Atmospheric Cherenkov light image



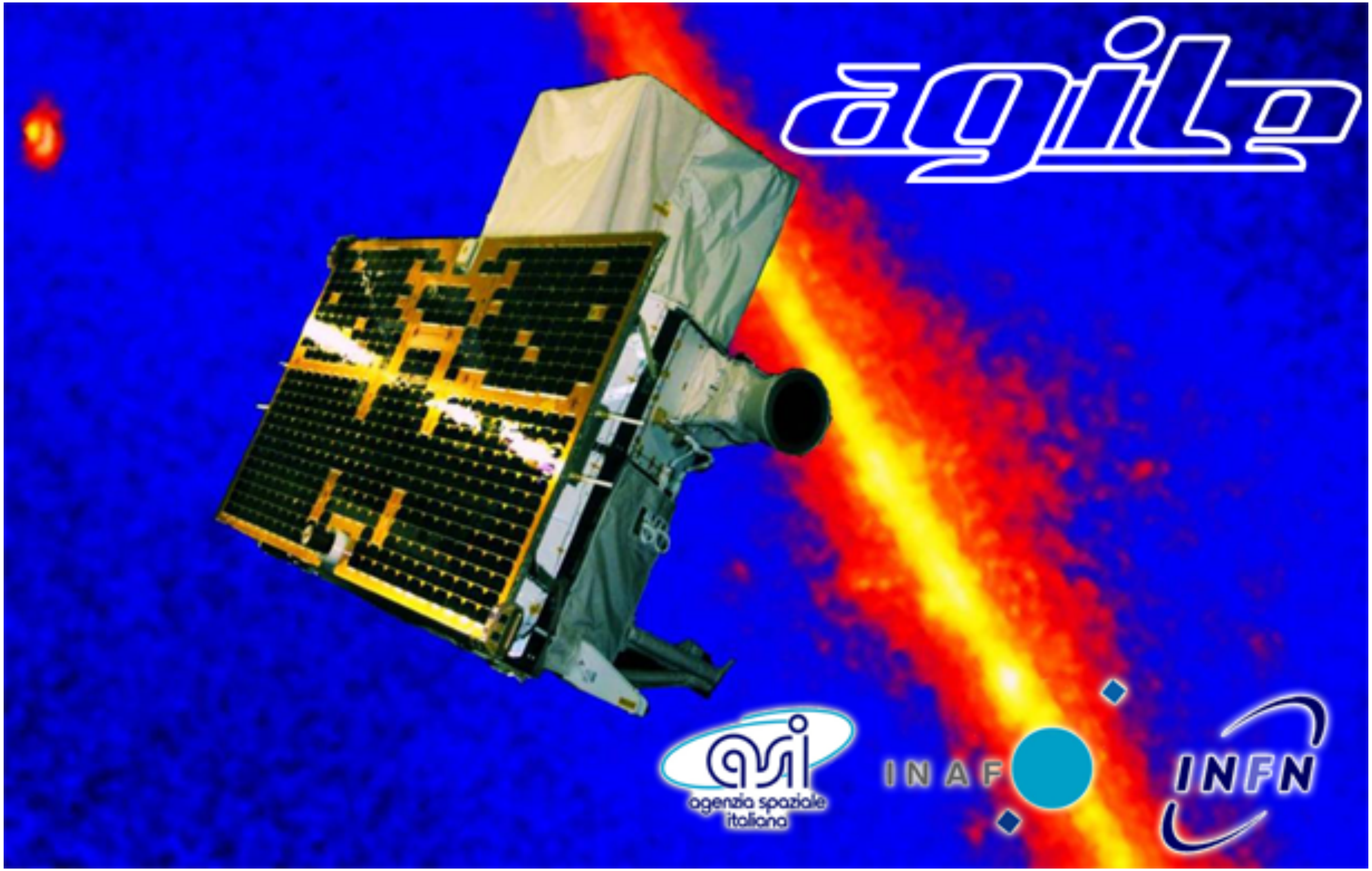
Shower image, 100 GeV γ-ray adapted from: F. Schmidt, J. Knapp, "CORSIKA Shower Images", 2005, https://www-zeuthen.desy.de/~jknapp/fs/showerimages.html

Not to scale

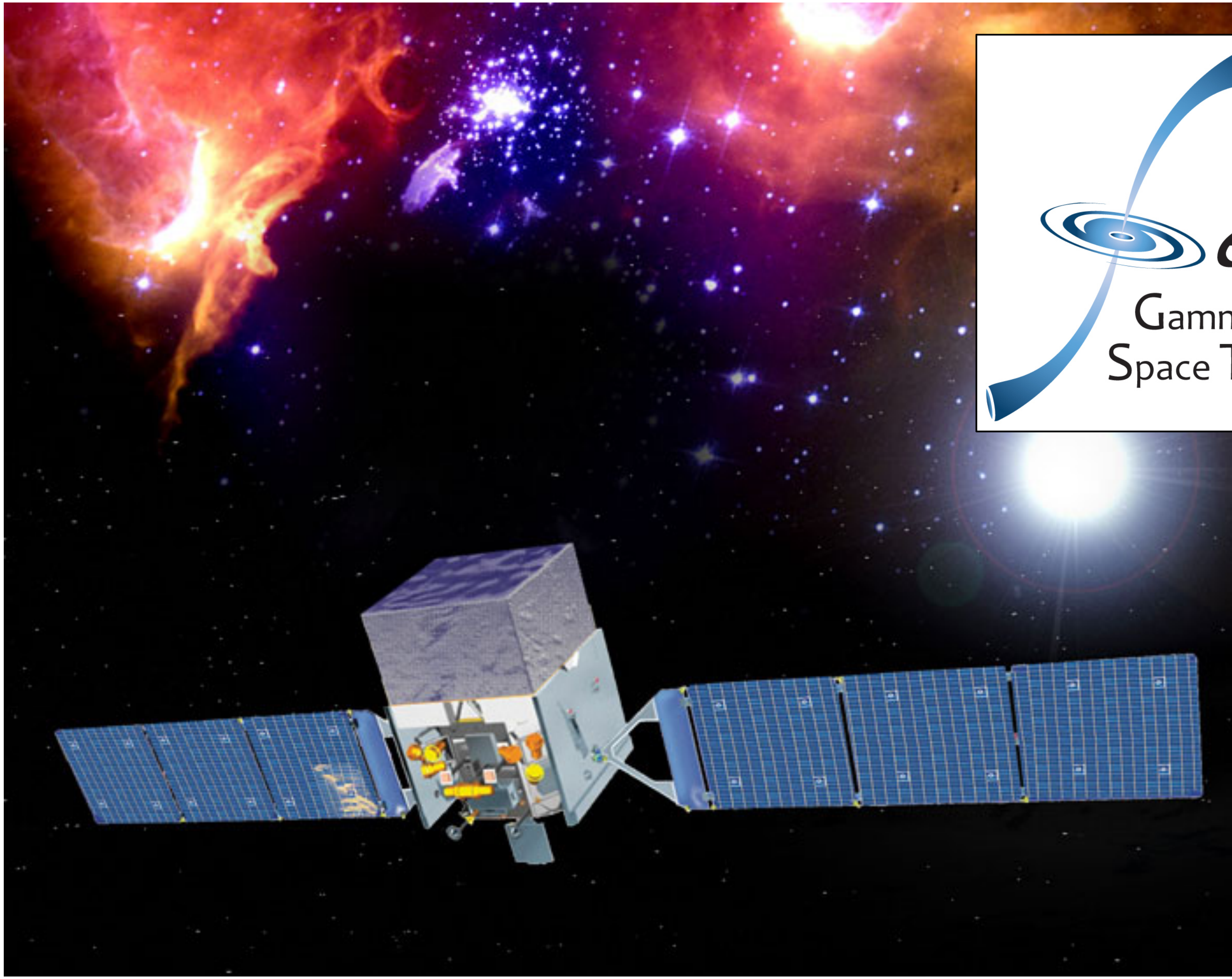
Astrofisica Gamma dallo Spazio



Astrofisica Gamma dallo Spazio



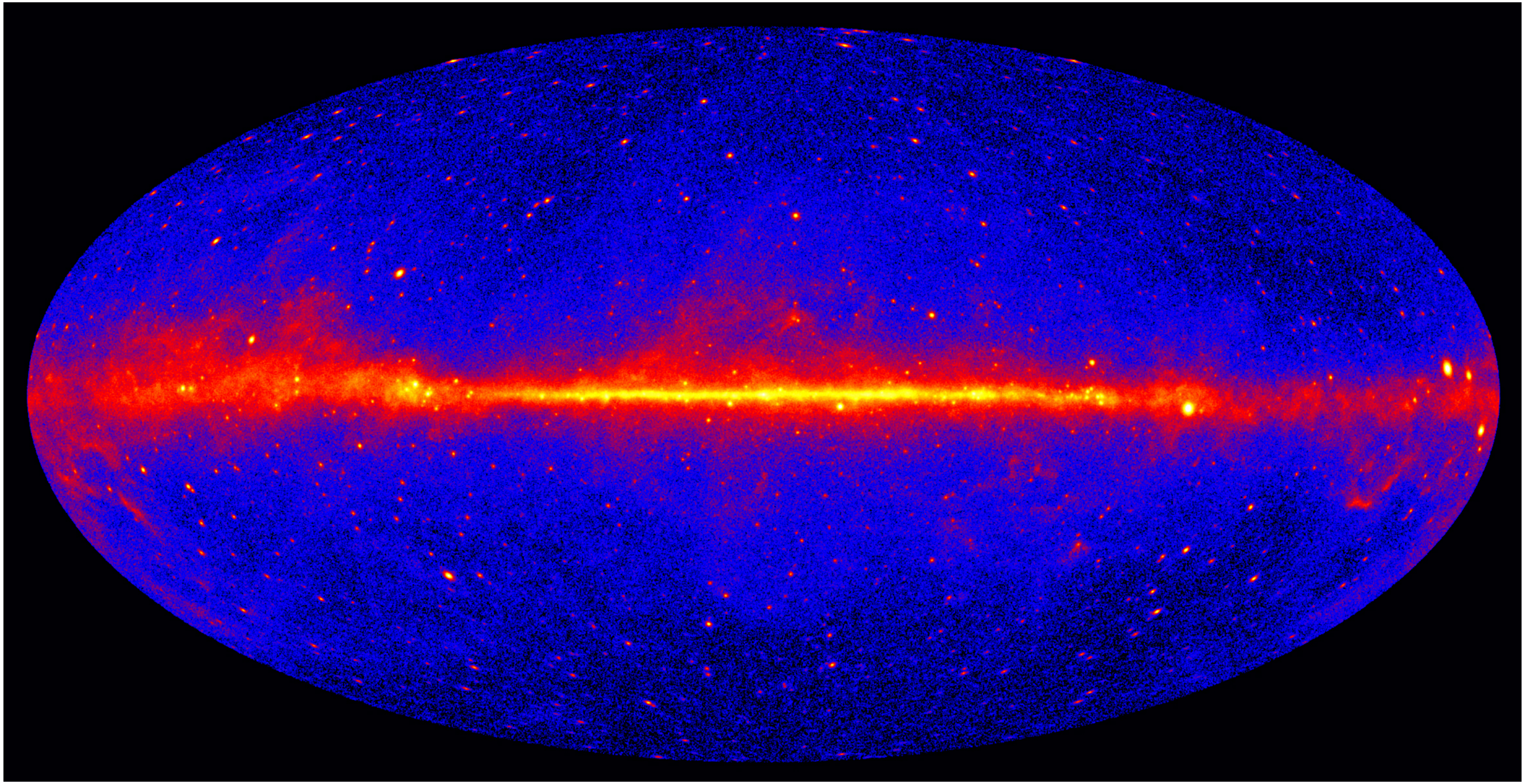
Astrofisica Gamma dallo Spazio



fermi

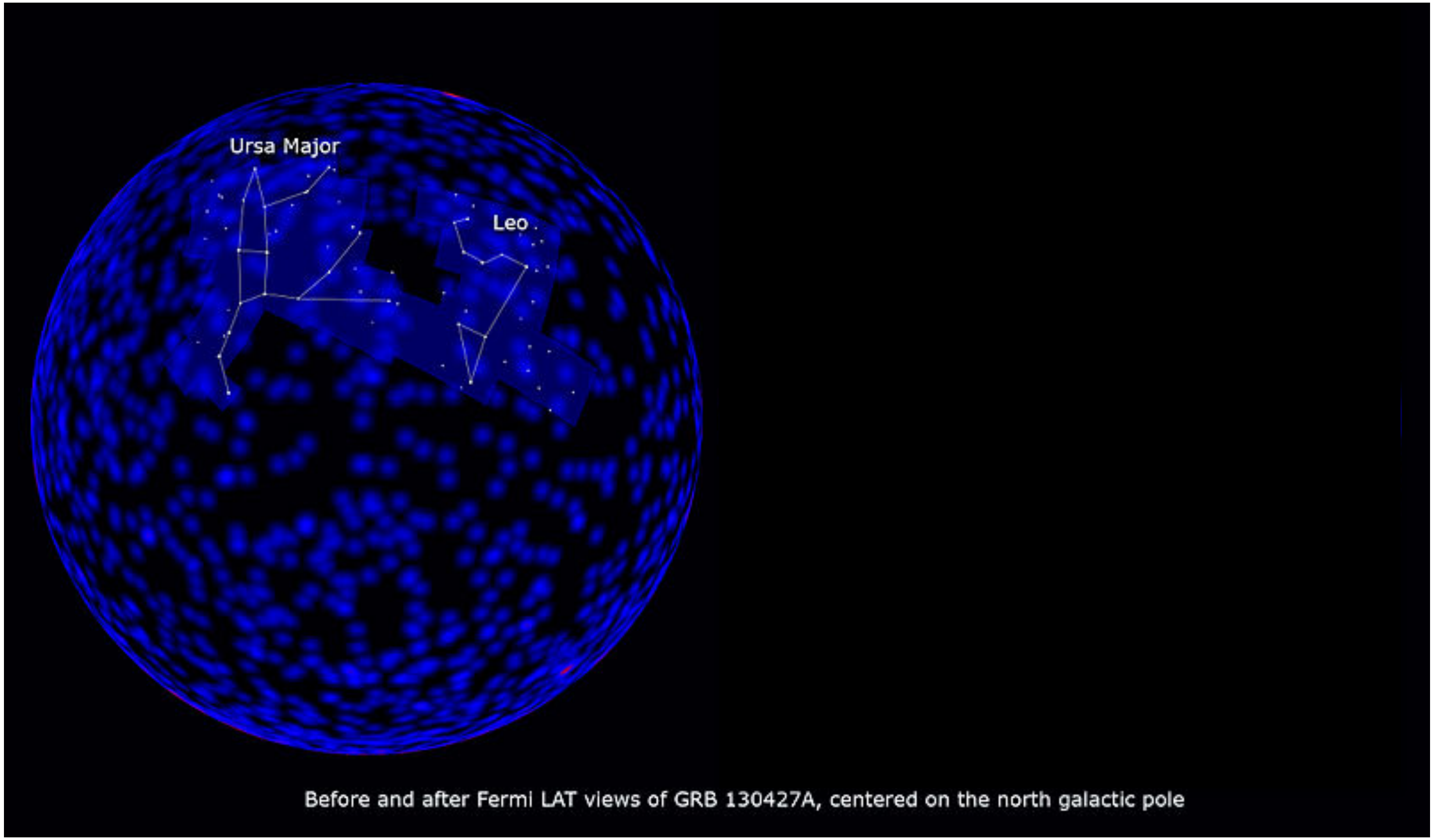
Gamma-ray Space Telescope

Astrofisica Gamma dallo spazio

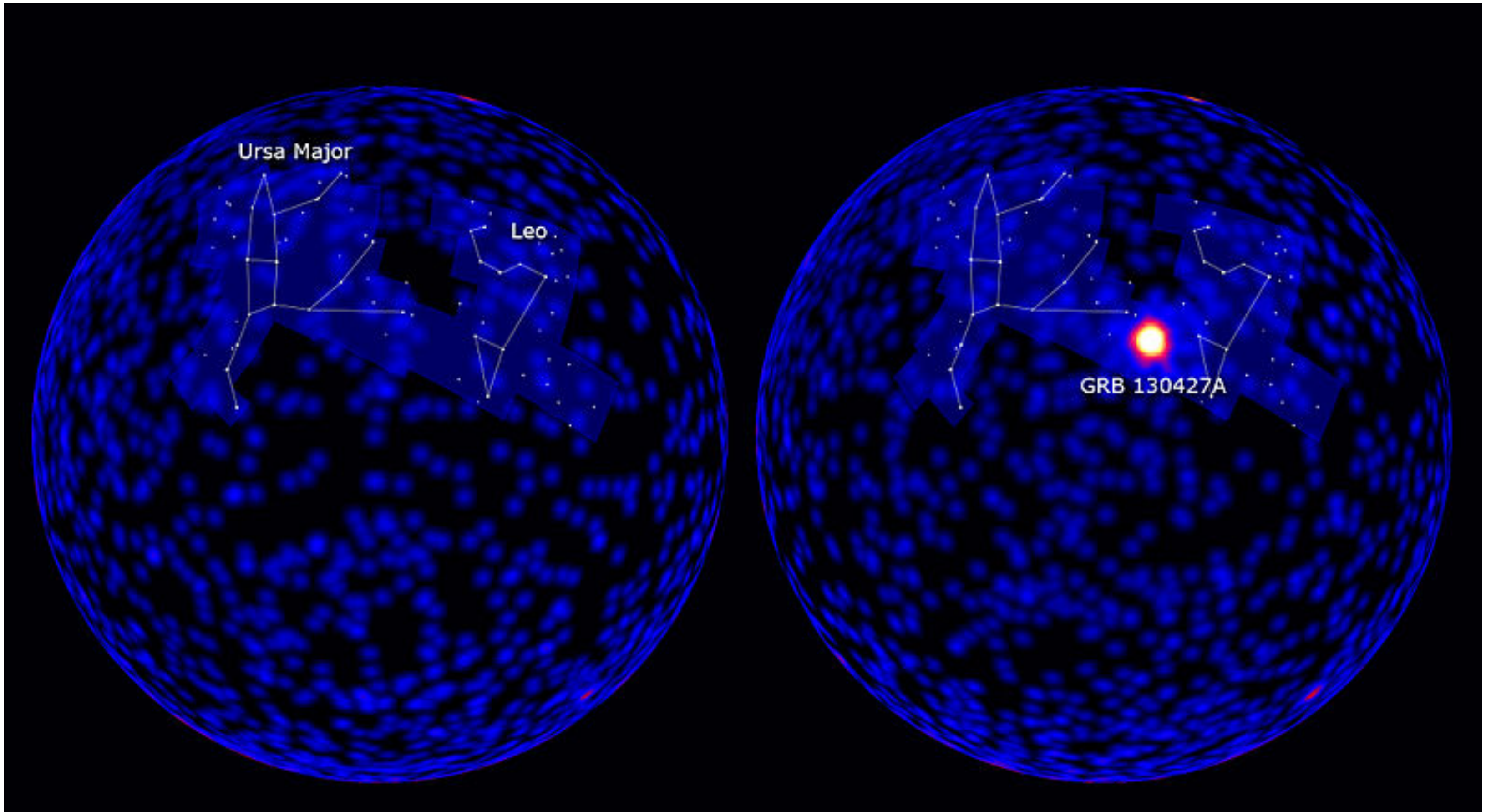


Credits: NASA & Fermi/LAT collaboration

I Gamma-ray Bursts

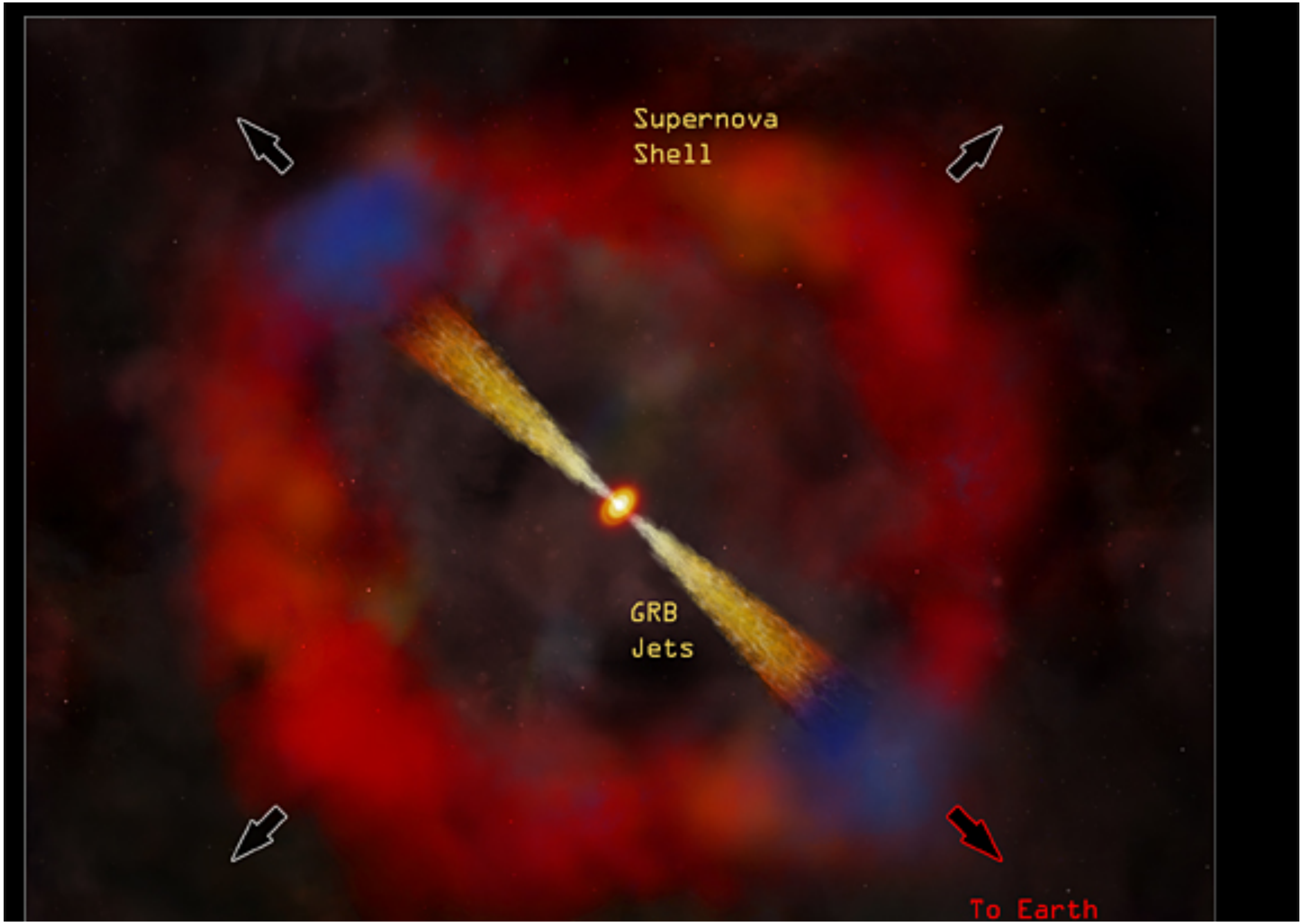


I Gamma-ray Bursts

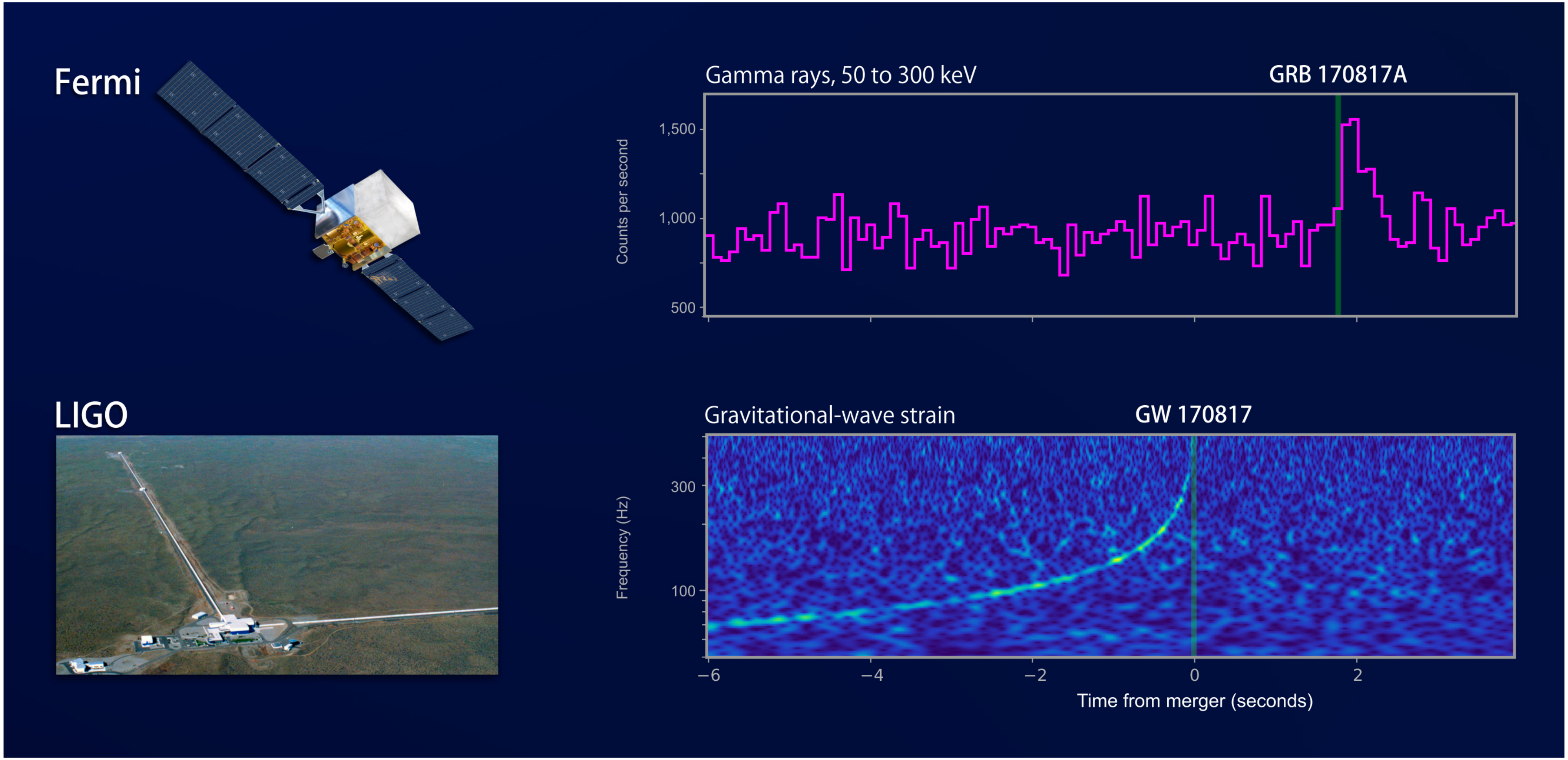


Before and after Fermi LAT views of GRB 130427A, centered on the north galactic pole

I Gamma-ray Bursts



GRBs e Onde Gravitazionali

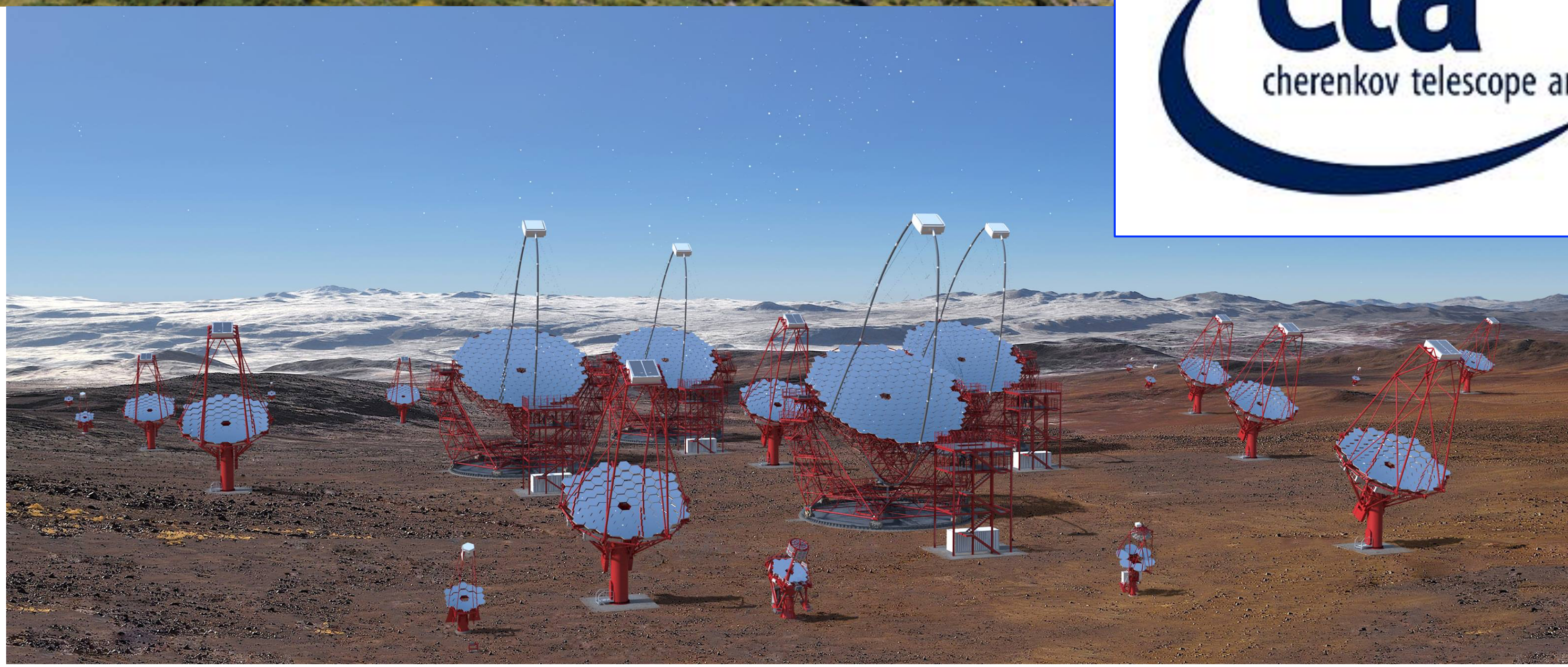


Astrofisica Gamma da Terra

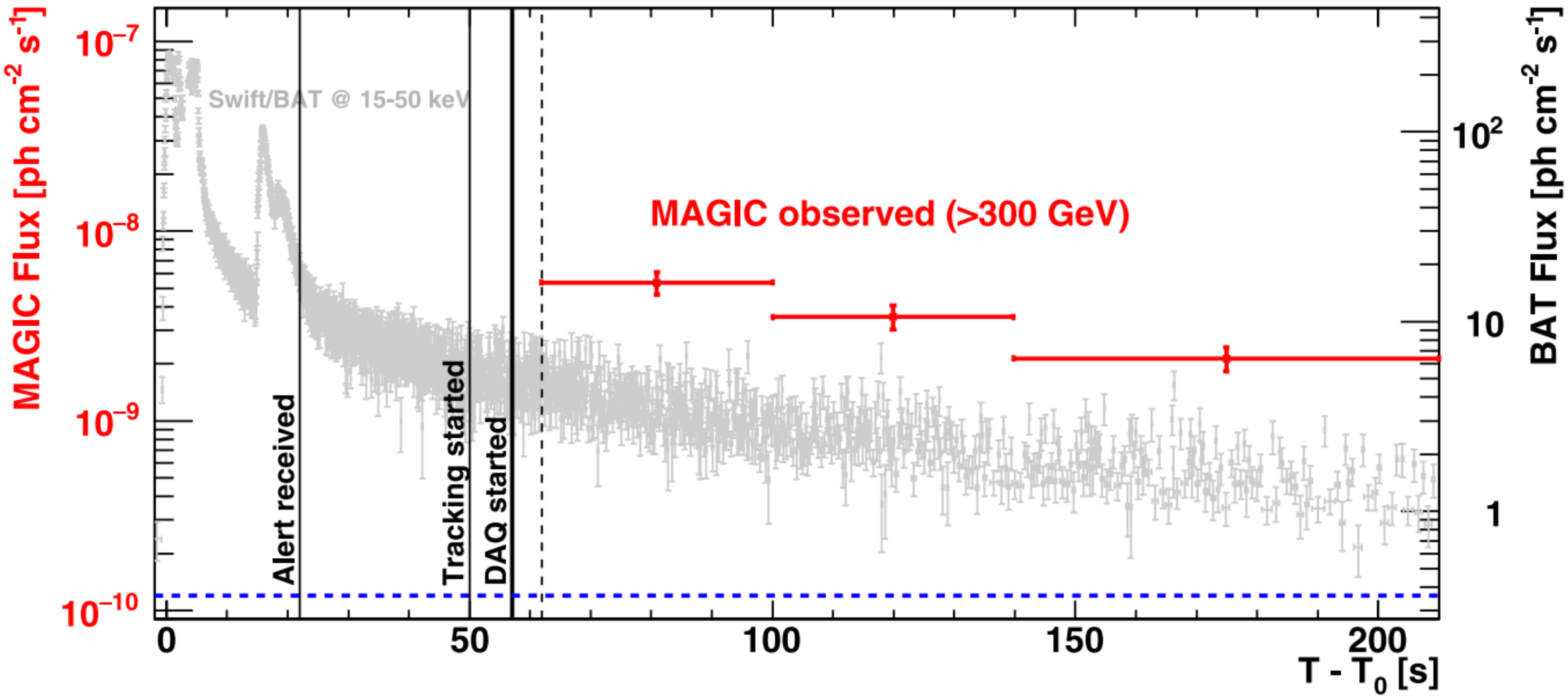
Astrofisica Gamma da Terra

cta

cherenkov telescope array



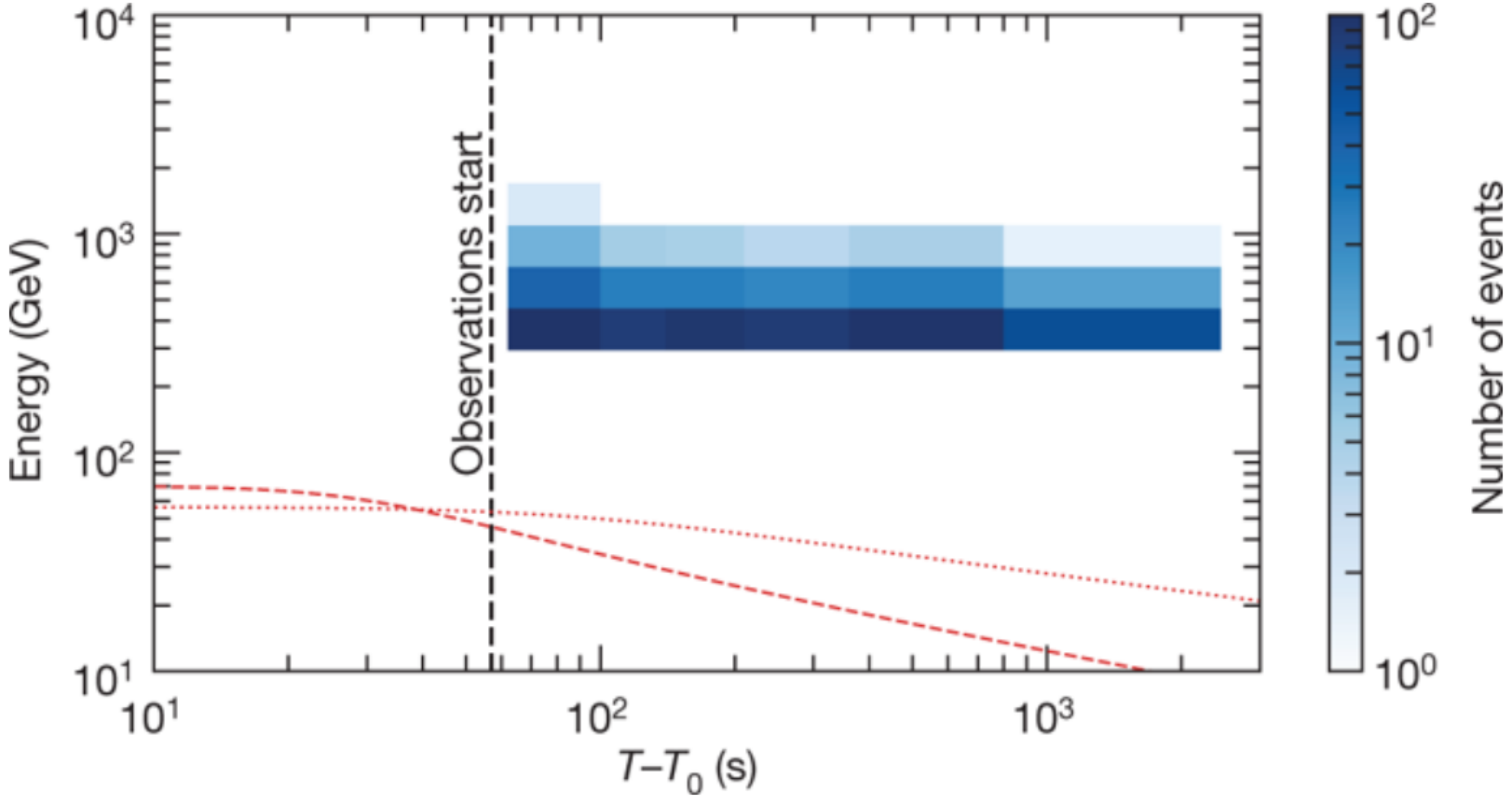
I GRB alle altissime energie



GRB 190114C

Acciari et al. 2019a

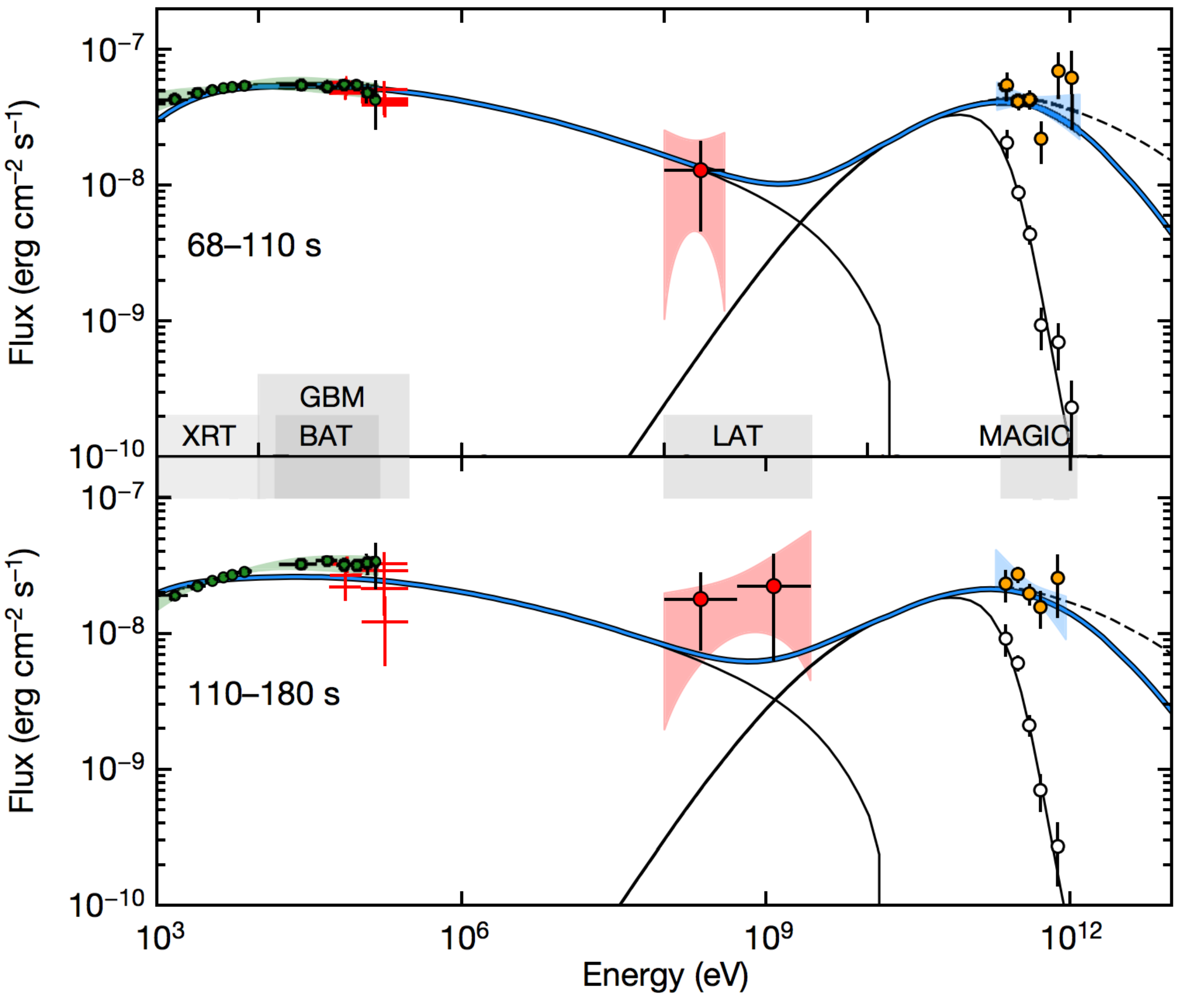
I GRB alle altissime energie



GRB 190114C

Acciari et al. 2019a

I GRB alle altissime energie



GRB 190114C

Acciari et al. 2019b