

## **NEWSLETTER 24**

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## SPACE FERMI WILL CONTINUE TO OBSERVE THE SKY UNTIL 2018

The Fermi gamma ray space observatory, in orbit since 2008 and built and led by a large international collaboration in which Italy is participating with the Italian Space Agency (ASI), INFN and the

National Institute of Astrophysics (INAF), will continue its exploration of the universe until 2018, with a scientific program that reinforces the issues of astroparticle physics and joint observations with other observatories. NASA announced so on 9 June at the conclusion of the Senior Review 2016, the procedure for the assessment of space missions in activity. The data collected by Fermi over the years has revolutionised our understanding of high energy cosmic radiation, bringing us information on some of the most turbulent and complex systems in the universe, capable of accelerating particles to ultra-relativistic energies in extreme gravity and magnetic field conditions.

The possibility of performing multi-messenger astronomy represent a key point of the proposed extension of the operations presented by the Fermi group and approved by NASA. The goal is implementing simultaneous observations of gamma radiation with Fermi and of other cosmic messengers with the most recent charged radiation observatories, such as AMS-02, DAMPE, neutrino observatories, such as IceCube and KM3NeT, and gravitational wave observatories, such as LIGO and VIRGO.