

Status of the MAGIC project

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The MAGIC (Major Atmospheric Gamma-ray Imaging Cherenkov) telescope is the world largest ground based gamma ray telescope (17 m diameter) with the lowest energy threshold. It was built at the Roque de Los Muchachos astrophysics observatory at La Palma Island. Its official inauguration was on October 2003, and after the commissioning phase it is now operating in a standard way. The main goal of the project is to study the high energy phenomena in the universe in the unexplored energy region between 10 GeV and 300 GeV. To reach such a low energy threshold compared to the first generation of Cherenkov Telescopes, several technological innovations were made and are now functional for the first time in a Cherenkov Telescope. The current performance of the telescope and the most relevant results obtained will be reported.

In order to go further in lowering the energy threshold and to achieve a higher sensitivity, the MAGIC collaboration has already started the construction of MAGIC-II telescope, a second 17m telescope at a distance of approximately 80 meters from the first one, which will include advanced photo detectors in its camera. The expected performance of the MAGIC + MAGIC II system in stereoscopic/coincidence mode will be outlined.

*Updated list of collaboration members available at
<http://www.magic.mppmu.mpg.de>