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Fermi LAT observation of quiet gamma-ray emission from the Sun

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We show the latest results of Fermi-LAT observations of the quiescent Sun during the first 18 months of the mission.

During this period the solar activity was at its minimum, hence the solar emission induced by cosmic rays was at its maximum. Two emission components are clearly distinguished: the point-like emission from the solar disk due to the cosmic-ray cascades in the solar atmosphere, and the extended emission due to inverse Compton scattering of cosmic ray electrons on solar photons in the heliosphere.

We present the entire analysis, showing spectra and angular profiles of both components and discuss the comparison with models and future plans.

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