Cosmic Ray Anisotropy Workshop CRA2019



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Anisotropies in the flux of cosmic ray leptons

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The cosmic electrons and positrons have been measured with unprecedented statistics up to several hundreds GeV, thus permitting to explore the role that close single sources can have in shaping the flux at different energies.

The Fermi-LAT Collaboration has provided a new energy spectrum for the upper bounds on the e+ + e- dipole anisotropy. This observable can bring information on the emission from local Galactic sources, notably measured with high precision at radio frequencies. We develop a framework in which e+ and e- measured at Earth from GeV up to tens of TeV energies have a composite origin. We discuss in particular the constraints imposed by the most recent data on the e+ + e- dipole anisotropy.

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