

Abstract number: S3-18

TeV anisotropy

30 min. invited talk

Global Anisotropies in TeV Cosmic Rays Related to the Sun's Local Galactic Environment from IBEX

Schwadron, Nathan¹, Christian, Eric², McComas, David³ and Moebius, Eberhard¹

¹University of New Hampshire

²Goddard Spaceflight Center

³Southwest Research Institute

The Interstellar Boundary Explorer (IBEX) observes enhanced Energetic Neutral Atoms (ENAs) emission from a narrow "ribbon" likely centered on the local interstellar medium (LISM) magnetic field direction. Further, IBEX has improved knowledge of the local interstellar velocity based on interstellar atom measurements. These new determinations are shown to be consistent with the interstellar modulation of TeV cosmic rays revealed in global anisotropy maps of Milagro, AS-gamma and IceCube. We present here recent results from IBEX ENA observations on the global structure of the heliosphere and the association of the IBEX ribbon with the entry of TeV cosmic rays into the global heliosphere.