



ID de Contribution: 8

Type: **Oral presentation**

High-energy neutrinos from cosmic ray interactions in the Local Bubble

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We study the possibility that a local nearby supernova Vela is responsible for the knee in the cosmic rays spectrum. This source could also explain the excess of IceCube neutrinos with energies $E > 100\text{TeV}$ and gamma-ray excess at high Galactic latitudes at energies $E > 300\text{ GeV}$ in FermiLat data. Our work takes into account the presence of the Local Bubble which plays the role of a shield for cosmic rays flux and target to produce neutrinos and gamma rays from primordial Vela PeV protons.

Field

InterStellar Medium

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Classification de Session: Talk

Classification de thématique: Astrophysics