9th International Conference on New Frontiers in Physics (ICNFP 2020)



Contribution ID: 71

Type: Talk

Search for dark matter with the IceCube Neutrino Observatory

Wednesday, 9 September 2020 11:50 (25 minutes)

The indirect search of dark matter has been an important element in the scientific program of the IceCube since the beginning of the experiment. The IceCube Neutrino Observatory is a cubic kilometer neutrino telescope located at the South Pole which can detect the neutrino flux produced by the self-annihilation or decay of dark matter particles from regions where an over-density of dark matter is expected, such as the galactic center, the Sun, the Earth and more galactic and extra-galactic sources. IceCube results and best limits on the dark matter annihilation cross-section as well as spin-dependent dark matter nucleon interaction have significantly improved with time, leading to world-leading results in the field. This review will present the most recent IceCube results and the state of the art of indirect search of dark matter with neutrinos.

Is this abstract from experiment?

Yes

Is the speaker for that presentation defined?

Yes

Name of experiment and experimental site

IceCube Neutrino Observatory - South Pole

Internet talk

Yes

Details

Renzi Giovanni, Mr., IIHE-ULB, Belgium, https://www.iihe.ac.be/

Primary author: Mr RENZI, Giovanni (ULB)

Presenter: Mr RENZI, Giovanni (ULB)

Session Classification: Semiplenary