

Phenomenology 2017 Symposium



Contribution ID: 236

Type: parallel talk

Saving the MSSM from the Galactic Center Excess

Monday 8 May 2017 17:30 (15 minutes)

The minimal supersymmetric setup offers a comprehensive framework to interpret the Fermi–LAT Galactic center excess. Taking into account experimental, theoretical, and astrophysical uncertainties we can identify valid parameter regions linked to different annihilation channels. They extend to dark matter masses above 250 GeV. There exists a very mild tension between the observed relic density and the annihilation rate in the center of our galaxy for specific channels. The strongest additional constraints come from the new generation of direct detection experiments, ruling out much of the light and intermediate dark matter mass regime and giving preference to heavier dark matter annihilating into a pair of top quarks.

Summary

Author: BUTTER, Anja

Presenter: BUTTER, Anja

Session Classification: DM II