

Contribution ID: 549

Type: not specified

Probing Heavy Asymmetric Dark Matter with the Glashow Resonance

Tuesday 14 May 2024 14:00 (15 minutes)

The decay of asymmetric dark matter (ADM) leads to possible neutrino signatures with an asymmetry of neutrinos and antineutrinos. In the high-energy regime, the Glashow resonant interaction $\bar{\nu}_e + e^- \rightarrow W^-$ is the only way to differentiate the antineutrino contribution in the diffuse astrophysical high-energy neutrino flux experimentally, which provides a possibility to probe heavy ADM. In this talk, I will discuss the neutrino signal from ADM decay, the constraints with the current IceCube observation of Glashow resonance, and the projected sensitivities with the next-generation neutrino telescopes.

Mini Symposia (Invited Talks Only)

Author: LIU, Qinrui (Queen's University)

Co-authors: VINCENT, Aaron (Queen's University); Dr SONG, Ningqiang (Institute of Theoretical Physics, Chinese Academy of Sciences)

Presenter: LIU, Qinrui (Queen's University)

Session Classification: Dark Matter

Track Classification: Dark Matter