

# DPF-PHENO 2024

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## 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)

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