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## **Probing neutrino production in high-energy astrophysical neutrino sources with the Glashow Resonance**

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The flavor composition of high-energy neutrinos carries important information about their birth. However, the two most common production scenarios,  $pp$  and  $p\gamma$  collisions, lead to the same flavor ratio when neutrinos and antineutrinos are indistinguishable. The Glashow resonant interaction  $\bar{\nu}_e + e^- \rightarrow W^-$  becomes a window to differentiate the antineutrino contribution from the total diffuse neutrino flux, thus lifting this degeneracy. In this talk, I will discuss the power of Glashow resonant events in measuring the fraction of the  $\bar{\nu}_e$  flux with current IceCube data, and the projected sensitivities based on the combined exposure of next-generation Cherenkov neutrino telescopes around the globe.

### **Submitted on behalf of a Collaboration?**

No

**Primary authors:** LIU, Qinrui (Queen's University); Dr SONG, Ningqiang (Institute of Theoretical Physics, Chinese Academy of Sciences); VINCENT, Aaron (Queen's University)

**Presenter:** LIU, Qinrui (Queen's University)

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