## Measurement of the diffuse astrophysical muon neutrino spectrum with ten years of IceCube data

Wednesday 25 September 2019 14:10 (20 minutes)

The IceCube Neutrino Observatory has established the measurement of a flux of high-energy astrophysical neutrinos in several detection channels. Here, we present an update to the analysis of through-going muonneutrinos from the Northern Hemisphere. It was extended to almost ten years of data which have been re-processed (Pass-2) applying consistent event-selections and reconstructions. Additionally, an improved treatment of systematic uncertainties on the atmospheric fluxes was implemented. We present results of the updated spectral fit and discuss how the measurement compares to other results.

Primary author: STETTNER, Joeran (RWTH Aachen University)Presenter: STETTNER, Joeran (RWTH Aachen University)Session Classification: Presentation of recent results