Contribution ID: **158** Type: **Oral**

The Present and Future of Real-Time Alerts from AMON

Wednesday 9 August 2017 16:00 (15 minutes)

The Astrophysical Multimessenger Observatory Network (AMON), will connect observatories from around the world, enabling real-time coincidence searches of all four messengers (neutrinos, cosmic rays, gamma rays, and gravitational waves) and rapid follow-up observations of these alerts. AMON's first real-time alerts were commissioned in 2016 with "pass-through"notices of IceCube likely-cosmic (HESE and EHE type) neutrino events, leading to multiple follow-up campaigns which have been reported through the GCN circulars. Looking ahead, AMON's first bona-fide multimessenger real-time alerts are planned to be high-energy neutrino + gamma-ray ("nu + gamma") alerts resulting from coincidence of IceCube neutrinos and Swift, Fermi, or High-Altitude Water Cherenkov (HAWC) gamma-ray transients or subthreshold signals. The talk will summarize key properties of current alert streams and preview the expected properties of upcoming nu+gamma AMON Alerts.

Author: DELAUNAY, James (Penn State)

Presenter: DELAUNAY, James (Penn State)

Session Classification: Multi-messenger

Track Classification: Multi-messenger (incl. gravitational waves) and nuclear astrophysics