Contribution ID: **94**   Type: **not specified**

AMON: transition to real-time operations

Tuesday, 5 May 2015 16:48 (12 minutes)

The Astrophysical Multimessenger Observatory Network (AMON) will link the world's leading high-energy neutrino, cosmic-ray, gamma-ray and gravitational wave observatories by performing real-time coincidence searches for multimessenger sources from observatory subthreshold data streams. The resulting coincidences will be distributed to interested parties in the form of electronic alerts for real-time follow-up observation. We will present the science case, design elements, current and projected partner observatories, and status of the AMON project. Observatories that already signed the AMON Memorandum of Understanding (MoU) include the IceCube and ANTARES Neutrino Observatories, the HAWC and VERITAS gamma-ray observatories, the Pierre Auger Cosmic Ray Observatory and the Swift satellite experiment. AMON is an open network seeking new triggering and follow-up observatories, as well as collaborators interested in the scientific goals of AMON. The prototype of the AMON server has been online since August 2014 and processing archival data. Currently, we are deploying new high-uptime servers and will be ready to start issuing alerts as early as summer 2015. We will also discuss the primary results of implementing a new real-time analysis of the IceCube high-energy starting events (HESE) at the South Pole that will relay event positions for high-energy events to AMON.

Primary author: TEŠIĆ, Gordana (o=psu,ou=Institutions,dc=icecube,dc=wisc,dc=edu)

Presenter: TEŠIĆ, Gordana (o=psu,ou=Institutions,dc=icecube,dc=wisc,dc=edu)

Session Classification: Multi-Messenger

Track Classification: Multi-Messenger