

Talk at Splinter Meeting

Splinter E

AMON - THE ASTROPHYSICAL MULTIMESSENGER OBSERVATORY  
NETWORK

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The Astrophysical Multimessenger Observatory Network (AMON) will link the worlds 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, VERITAS, FACT gamma-ray observatories, the Pierre Auger Cosmic Ray Observatory, the Swift satellite experiment and the MASTER robotic telescope network. 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 September 2015.