

Extreme Energy Particles with JEM-EUSO

Tuesday 27 August 2013 14:00 (30 minutes)

The origin of the highest energy cosmic rays is still a great mystery. Recent observations have confirmed the extragalactic origin of cosmic rays above tens of EeV, whose sources should be among the most powerful extragalactic objects. The spectrum shows the effect of propagation from cosmological distances or possibly the maximum energy reach of cosmic accelerators. The lack of significant anisotropies and a possible change of composition are surprising. Not a single source of these extremely energetic events has been identified. To identify the sources a significant increase in statistics is necessary. The pioneering Extreme Universe Space Observatory (EUSO) on the Japanese Experiment Module (JEM) of the International Space Station, JEM-EUSO, will detect a large number of extreme energy cosmic rays finally leading to a identification of these mysterious extreme accelerators.

Presenter: OLINTO, Angela

Session Classification: Ultra-high-energy messengers