Contribution ID: **33** Type: **not specified**

The JEM-EUSO mission status and pathfinder results

Wednesday, September 16, 2015 12:00 PM (25 minutes)

The JEM-EUSO mission, on board of the International Space Station (ISS), has the primary objective of doing astrophysics detecting extreme energy cosmic rays (EECRs), above 3x10^19eV. This Extreme Universe Space Observatory (EUSO), will be the first space mission to be devoted to the study of this energy range with the aim of extending the knowledge on sources, spectra and composition of cosmic rays in this energy range.
The instrument has been designed to detect the UV photons emitted in the shower produced by the EECR interaction with the atmosphere and reconstruct its arrival direction and energy.
To validate this technique, three pathfinders and one precursor has been approved. EUSO-Balloon, flew on board of a stratospheric balloon, in collaboration with the French Space Agency CNES. EUSO-TA, is taking data on ground at the Telescope Array experiment site in Utah, US. Mini-EUSO, approved by the Russian Space Agency, will be installed in the ISS. K-EUSO, a modification of the KLYPVE experiment, will be attached at the Russian module of the ISS.
The tatus of the mission and precursors will be reviewed and details will be given on the EUSO-BALLOON and EUSO-TA results.

Primary author: CAFAGNA, Francesco Saverio (BA)

Presenter: CAFAGNA, Francesco Saverio (BA)

Session Classification: New Technologies and Next generation of Experiments

Track Classification: New Technology and Next generation of Experiments