
International Session (Oral) | Symbol P (Space and Planetary Sciences) | P-CG Complex & General

[P-CG11_28AM1]Instrumentation for space science

Convener:*Ayako Matsuoka(Research Division for Space Plasma, Institute of Space and Astronautical Science, Japan Aerospace Exploration Agency), Ichiro Yoshikawa(The University of Tokyo), Chair:Ayako Matsuoka(Research Division for Space Plasma, Institute of Space and Astronautical Science, Japan Aerospace Exploration Agency), Ichiro Yoshikawa(The University of Tokyo)

Mon. Apr 28, 2014 10:00 AM - 10:45 AM 421 (4F)

This session will cover instrumentation and measurement techniques for the study of space science. We welcome contributions discussing newly designed instruments, and mission oriented instruments for satellites / sounding rockets already in space or near launch as well as the ground based instruments. Status reports on the space missions are also welcome. This is the international session. We encourage the contributions especially from the Asian countries based on their own space missions.

10:30 AM - 10:45 AM

[PCG11-P06_PG]Verification of engineering models of medium energy particle analysers for ERG

3-min talk in an oral session

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Keywords:Geospace exploration spacecraft ERG, medium energy ion, medium energy electron

ERG (Exploration of energization and Radiation in Geospace) is a geospace exploration spacecraft, which is planned to be launched in FY2015. The mission goal is to understand the radiation belt dynamics especially during space storms. The key of this mission is the observations of electrons and ions in medium-energy range (10-200 keV), since these particles excite various electromagnetic waves (e.g., EMIC waves, magnetosonic waves, and whistler waves), which are believed to play significant roles in the relativistic electron acceleration and loss. Engineering models (EMs) of medium energy electron analyser and ion mass spectrometer have been developed and their performances and tolerances are tested. We report the results of these verification tests on EMs.