

**R006-50**

**Zoom meeting B : 11/4 AM2 (10:45-12:30)**

**11:45~12:00**

## **A new calibration method for LEPe low-energy electron data of the ERG satellite**

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The ERG (Arase) satellite carries the LEPe instrument that measures three-dimensional electron distributions with energies from ~20 eV to 20,000 eV to investigate plasma environments in the inner magnetosphere. A calibration method and its parameters are obviously crucial to obtain accurate physical quantities of electrons such as differential flux. In this presentation, we present a newly developed calibration method for low-energy electron measurement of the LEPe instrument. The new calibration method is based on a four-year-long electron dataset made by the instrument since the launch, considering voltage settings of the MCP (micro-channel plate) device. In the new method, we have three steps of data processing for more accurate electron energy flux from raw count rates: 1) correction of response to background counts, 2) normalization of sensitivity differences between anode channels and 3) estimation of MCP efficiency profiles. We are now preparing a new dataset of electron measurement by using the new calibration method, which will be soon available from the ERG Science Center.