

ISEE Workshop in FY2019

# Pulsating Aurora Workshop

脈動オーロラ研究集会

Organizer: K. Hosokawa (UEC) & Y. Miyoshi (ISEE, Nagoya U.)

Time: July 2-4, 2019

Place: ISEE, Nagoya University Building II  
Meeting room in the 3rd & 4th Floor  
(研究所共同館-II 3F, 4F 会議室)

Co-sponsored by (共催)

- ◆ Inner Magnetosphere Subgroup/SGEPSS (SGEPSS 内部磁気圏分科会)
- ◆ JSPS Research Grant-S: Pulsating Aurora Project (科研費補助金: 基盤S)
- ◆ JSPS- Bilateral Project: Japan-Russia (科研費補助金: 二国間 日本-ロシア)

July 2 (Tue) <https://zoom.us/j/216730402>

- 13:00-13:10 Introduction to the PsA meeting**  
Keisuke Hosokawa (UEC)
- 13:10-13:30 Latitudinal dependence of internal modulation of PsA seen in simultaneous optical observations from 4 stations in Scandinavia**  
Yuki Kawamura (UEC) et al.
- 13:30-13:50 Narrow field-of-view high-speed imager observation of PsA and burst observation by Arase**  
Herbert Akihito Uchida (NIPR) et al.
- 13:50-14:10 Observations of PsA during Arase and ground-based conjunction intervals in March 2019**  
Keisuke Hosokawa (UEC) et al.
- 14:10-14:40 Comparison of spacecraft data on quasi-periodic VLF emissions with the flow cyclotron maser model**  
Andrei Demekhov (PGI)
- 14:40-15:10 Break**
- 15:10-15:40 Information about ionosphere-magnetosphere plasma: extracting from optical and VLF observations.**  
Boris Kozelov (PGI)
- 15:40-16:00 Large-scale characteristics of pulsating aurora periodicities: multi-point high-speed optical observations in Scandinavia**  
Satoshi Ebukuro (UEC) et al.
- 16:00-16:20 Low energy electron precipitation by ECH waves based on Arase observations**  
Mizuki Fukizawa (Tohoku Univ.) et al.
- 16:20-16:40 Fine-scale visualization of aurora in a wide area using color digital images from the International Space Station**  
Sota Nanjo (UEC) et al.
- 16:40-17:00 Interhemispheric differences of the high-latitude ionospheric convection patterns deduced from Cluster/EDI observations**  
Matthias Förster (GFZ German Research Centre for Geosciences) and Stein Haaland (Max-Planck-Institute)
- 18:00- Banquet**

July 3 (Wed) <https://zoom.us/j/125350080>

- 09:30-09:50 Auroral arc and pulsating aurora associated with Pc5 field line resonance**  
Natsuo Sato (NIPR)
- 09:50-10:10 Enhancement of whistler-mode chorus in association with Pc 4-5 ULF waves and related variation of high energy electrons**  
Atsuhiko Oono (Tohoku Univ.) et al.
- 10:10-10:30 Variations of cosmic noise absorption (CNA) by energetic electron precipitation (EEP) and changes of the auroral morphology**  
Taishiro Miyamoto (ISEE, Nagoya U.) et al.
- 10:30-10:50 Break**
- 10:50-11:10 Spatio-temporal development of magnetospheric ELF/VLF waves estimated by PWING-ERG-RBSP wave measurements, POES particle measurements, and RAM simulations for the 26-30 March 2017 storm**  
Yuhei Takeshita (ISEE, Nagoya U.) et al.
- 11:10-11:30 PARM: Investigation of precipitating high-energy electrons into the auroral ionosphere with RockSat-XN and LAMP sounding rockets**  
Kazushi Asamura (ISAS/JAXA) et al.
- 11:30-11:50 PARM-HEP Observation of Precipitating High Energy Electrons over Pulsating Aurora**  
Taku. Namekawa (Tokyo Univ.), Takefumi Mitani (ISAS/JAXA), and Kazushi Asamura (ISAS/JAXA)
- 11:50-13:00 Lunch break**
- 13:00-13:20 Computer simulation for precipitating PsA electrons and variation of auroral luminosity**  
Yoshizumi Miyoshi (ISEE, Nagoya U.) and Shinji Saito (NICT)
- 13:20-13:40 The development of an auroral camera for the LAMP rocket experiment**  
Naoshi Yagi (Tohoku Univ.), et al.
- 13:40-14:00 Status of the development of LAMP/MIM onboard the LAMP rocket**  
Masahito Nose (ISEE, Nagoya Univ.), et al.
- 14:00-14:20 Discussion on the LAMP rocket experiment**  
Lead: Kazushi Asamura (ISAS/JAXA)
- 14:20-14:40 Discussion on Arase-ground conjunction in 2019-2020 winter season**  
Lead: Keisuke Hosokawa (UEC) and Yoshizumi Miyoshi (ISEE, Nagoya U.)
- 14:40-15:00 Discussion**

# JSPS- Bilateral Project: Japan-Russia Meeting

Organizer: Shin-ichiro Oyama (ISEE, Nagoya U.)

Sponsored by JSPS- Bilateral Project: Japan-Russia (科研費補助金: 二国間 日本-ロシア)

## July 3 (Wed) - Day 2 (following the Pulsating Aurora Workshop)

16:00-18:00 Check event lists prepared by Japan and PGI (#1)

18:00- Dinner

## July 4 (Thu) - Day 3

09:00-09:10 Opening

Shin-ichiro Oyama (ISEE, Nagoya U.)

09:10-09:25 Status Report of ERG

Yoshizumi Miyoshi (ISEE, Nagoya U.)

09:25-09:40 Status Report of Japanese Ground-based Instruments

Keisuke Hosokawa (UEC)

09:40-09:55 Status Report of PGI Ground-based Instruments & Annual Meeting at Apatity

Boris Kozelov (PGI)

09:55-10:15 Break

10:15-10:25 Project Plan proposed in the Japanese Application

Shin-ichiro Oyama (ISEE, Nagoya U.)

10:25-10:35 Project Plan proposed in the Russian Application

Andrei Demekhov (PGI)

10:35-12:00 Event Presentation: methodology and assignment of the task (#1)

12:00-13:30 Lunch

13:30-15:00 Event Presentation: methodology and assignment of the task (cont.)

15:00-15:10 Short break

15:10-16:00 Research Presentation

**Nonlinear EMIC wave-particle interaction analysis: Arase observation**

Masafumi Shoji (ISEE, Nagoya U.) et al.

**Conjugated quasi-periodic ELF/VLF emissions between the Arase satellite and both Van Allen Probes**

Claudia Martinez-Calderon (ISEE, Nagoya U.) et al.

16:00- Individual Research Meeting

#1: Mainly based on camera data, each group (Kiban-S and PGI) prepares event list in advance.

At the afternoon slot on 07/03, the lists are compared to find good events. The selected events are presented at the second slot on 07/04.