16th June, 2020

Dear participants

30th Workshop on JAXA Astrodynamics and Flight Mechanics

Coordinator　Jun'ichiro Kawaguchi

Conference Information

Date　　　　　:　**20th (Mon) and 21st (Tue) July, 2020**

Style　　　　　:　**Virtual Conference** (Online presentation)

How to apply　:　Please find an application form on website, fill it out with a presentation abstract (about 100 words) and send it via email to the secretary astro_secretary@jaxa.jp

Application Deadline:　**30th (Tue) June, 2020**

All presenters are required to submit a post-conference manuscript after the conference.

Application　:　Miwa Fukazawa, Kawaguchi Laboratory, ISAS, JAXA

TEL:　+81 50-3362-6034　FAX: +81 42-759-8322

E-MAIL：　astro_secretary@jaxa.jp

Web：　http://www.hayabusa.isas.jaxa.jp/kawalab/astro/2020/index.html

Other information:　No fee for participation and submition of post-conference manuscript.

We do NOT hold the copyright of your manuscripts.

A presenter has a 30 minutes time slot for one talk including Q&A discussion.

Participation of foreign students is welcomed.

Papers are sought on fundamental aspects and practical applications of astrodynamics and flight mechanics. The workshop welcomes the papers still under investigation, and　strongly suggests the participation of post-graduates students and younger researchers with their contribution.

<TOPIC LIST>

The topic of this symposium is the flight mechanics and application for a spacecraft. However, the term astrodynamics is **NOT** limited to orbital dynamics and celestial dynamics. Various related topics such as robotics, aerodynamics, structure analysis are welcomed in this symposium. Of course navigation, guidance and control is the major field in this symposium.

We expect the presentation about fundamental applied dynamics, not just an introduction of a certain project. When you submit an application form, **please choose a session number** you would like to join from the list below.

[SESSION LIST]
1. Space robotics, manipulator, docking.
2. Multibody dynamics including collision physics.
3. Attitude control and orbital dynamics. Control and identification related to them
4. Dynamics on a spacecraft with flexible structure. Modeling and robust control of LSS (large space structure). Tether problem. Identification problem for space structure.
5. Aerodynamics for space-plane. Dynamics on re-entry, aerocapture, aerobraking.
6. Orbit design and optimization, mission analysis,
7. Deep space navigation and orbit determination. Optical navigation. Encounter navigation, guidance
8. Ground simulator test bench and control experiment related to above topics.
9. Probe, rover and ground support for lunar/planetary explorations. Robotics, image processing, AI, sensor, information processing, control, landing.
10. GNC related to formation flight.

＊Proposal for an intensive session for a specific topic is welcomed.