# Sustainable Space Development Visions 2040



Young Professionals Program

Technological Innovation Moon/Mars city and space resource utilization

> International Collaboration

Industry-Academia-Government Collaboration

> Raison d'être of Japan in Space Development

Environmental protection: debris management, planetary protection

### **Background and Purpose**

In the 2020s, space activities will reach a turning point due to the rapid growth of the commercial space sector and the development of new infrastructures such as lunar orbital gateways and space transportation systems. In the future, it will be necessary to think about space development visions involving not only national government organizations and academic institutions but also with private companies. In addition, "sustainability" is an indispensable keyword for future space development visions. Sustainability here includes not only environmental sustainability, such as debris management and planetary protection, but also economic sustainability, allowing space development without dependence on governmental budgets. Therefore, the ISTS will hold a program in which students and young professionals from the industry, the academia, and the government can work together on the building blocks of sustainable space development visions for 2040. Through this activity, we aim to create a team that can not only draw cross-sectional visions, but also break through the vertical divisions of occupations and fields, to solve problems as one.

## Activities

Six teams (about six members each) will be formed to discuss sustainable space visions. Each team will discuss "themes to be solved for 2040" and present and discuss their vision for solving the issues at the plenary session of ISTS on March 3, 2022.

# **Discussion Theme**

- Team lpha . Technological innovation
- *Team \beta*. Moon/Mars city and space resource utilization
- Team  $\gamma$ . Environmental protection (e.g. debris management planetary protection)
- Team  $\delta$ . Industry-academia-government collaboration
- Team  $\, arepsilon \,$  . International collaboration
- *Team \boldsymbol{\zeta}* . Raison d'être of Japan in Space Development

## Schedule

January 31, Deadline of application (Team will be confirm in a week) Feburary TBD, Ice breaking and brain storming #1 Feburary TBD (during ISTS), Networking and brain storming #2 March 3 14:00-15:40 (TBC), Pitch and panel discussion in plenary session

## How to Apply

Please access the following website or the QR code shown on the right. <u>https://forms.gle/GeuRuysEgYcFr7Ax8</u>

### **Organizing Committee Members**

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