CALL FOR IDEAS



2023-05-08

Call for Ideas for small science payloads on the International Space Station

The Swedish National Space Agency (SNSA) is currently working on a possible flight opportunity for a Swedish ESA Project Astronaut. According to currently envisaged schedule, such a flight would take place within one year from now, with the earliest possible launch date in November 2023. While the process to secure a flight opportunity is still ongoing, SNSA wishes to investigate the interest of Swedish scientists in providing small scientific payloads, to be launched to ISS during the possible flight of a Swedish ESA Project Astronaut.

The mission under consideration is a short-term ESA Project Astronaut mission of 10-12 days. During the mission the Swedish ESA Project Astronaut is expected to participate in ESA scientific experiments that are already installed/ongoing at ISS, based on previous ESA calls. In addition to the ESA scientific activities, there may be an opportunity to launch one or several small Swedish payloads, pending availability of funds, compatibility with the flight schedule, allocation of upload mass and technical requirements.

At the moment, all the programmatic and technical aspects of the envisaged ESA Project Astronaut mission have not yet been clarified. SNSA is in close contact with ESA with respect to the definition of the mission and its scientific content. In addition, SNSA is exploring opportunities that may be available through commercial service providers for ISS payloads and experiments, such as ICE Cubes, see <u>https://www.icecubesservice.com</u>.

The schedule of a possible Swedish ESA Project Astronaut flight to ISS is very tight and to have any chance to launch Swedish experiment(s), there is not enough time to wait for finalisation of all the aspects before issuing a Call for such payloads.

For this reason, SNSA is launching a non-committing Call for Ideas (CFI) right now. The aim of the call is to collect inputs from the Swedish science community on possible small payloads that are ready for flight or can be prepared quickly, targeting launch date in November 2023. As examples, such payloads may be small biological or other samples that are to be exposed to microgravity, small autonomous instruments, etc. Please note that the large experiment racks of the Columbus Laboratory are allocated for ESA selected experiments and they are not available for this call. The CFI is non-committing and does not guarantee selection of a payload or its funding.



If suitable payload candidates will be identified by SNSA on the basis of this CFI, there will be a second step that will include assessment of the scientific quality of the experiment/payload, technical aspects, compliance with the flight schedule as well as funding needs.

We welcome responses from the broader science community within all science fields that may benefits from microgravity and/or environment at ISS. The payloads should be light (grams rather than kilograms) and ready to fly or require very short preparation time.

Please use the <u>template</u> provided with this call when submitting your response. The deadline for submitting your answer is May 23, 2023. Please send your answer as a pdf or MS Word document attachment to <u>dannenberg@snsa.se</u>.

In the subject line ("ämne") of your email, please indicate CFI_ISS experiment.

The name of your file with answers to the questions should be as follows: Last name_First name_Your organisation.

Many thanks in advance for your contribution!

Enclosure

• Template, to be used when responding to this call.