

ISSI/ISSI-BJ 2025 Joint Call for Proposals for International Teams in the Space & Earth Sciences

This call is jointly released by ISSI (International Space Science Institute) in Bern and ISSI– Beijing (ISSI-BJ). Applicants can apply for projects hosted by either ISSI or ISSI-BJ, or for joint ISSI/ISSI-BJ projects involving meetings at both sites. All submissions are assessed on the same criteria (see Sect. 4) by the joint ISSI/ISSI-BJ Science Committee, irrespective of the host venue chosen. The science justification section ("Part A" – see Sect. 5) of Team proposals undergoes anonymous peer review. ISSI thus expects applicants to fully anonymise their proposals in accordance with our guidelines. Applicants are encouraged to visit the ISSI and/or ISSI-BJ websites for information on the host venues and the scope of past/on-going Team projects.

1. Purpose

International Teams are small groups of scientists conducting space science research by collaborating on data analysis, theory and computational modelling. This call is open to all scientist – regardless of nationality or institutional affiliation – active in any of the following research fields:

- 1. Space Sciences: Astrobiology, Astrophysics and Cosmology, Fundamental Physics in Space, Magnetospheric and Space Plasma Physics, Planetary Sciences, Solar and Heliospheric Physics, and Solar-Terrestrial Sciences.
- 2. Earth Sciences using space data. This includes understanding and modelling Earth system processes, as well as climate change projections.

All Team projects must involve the analysis of data from space-based observatories or space missions. They may also draw on ground-based data where this adds scientific value.

2. Modus Operandi

International Teams typically consist of 8-12 core members from different institutions, who visit ISSI and/or ISSI-BJ for 2 (max. 3) one-week meetings (see also Sect. 3). Experience has shown that smaller Teams often make for a particularly dynamic research setting. The first Team meeting should preferably be organized no more than 6–9 months after approval of the proposal, and the overall project duration not exceed a period of 2 years.

Team members must commit to contributing to the project, and Team leaders shall secure this commitment prior to proposal submission. Team members are expected to attend all meetings in person, but virtual participation can be arranged in exceptional circumstances. Team leaders are responsible for overseeing Team activities throughout the project. They are ISSI's and ISSI-BI's main points of contact for all aspects related to coordination and planning.

International Teams should produce peer-reviewed publications (with acknowledgement of ISSI/ISSI-BJ support). Teams are required to maintain a website on the ISSI server (or, in the case of ISSI-BJ, on an external server), which provides general information on the project and Team, as well as an up-to-date list of publications and project outcomes.

3. Team Composition & Available Funding

A minimum of 4 different countries should be represented among the affiliations of the core members of an International Team including, for ISSI or joint ISSI/ISSI-BJ Teams, at least one ESA member state. ISSI/ISSI-BJ funding for International Teams is provided *in-kind* (see Sect. 6 for details). Publication costs are not an eligible expense. Meeting support for core members is capped at 24 person-weeks, e.g. 8 members for a maximum of 3 one-week meetings, or 12 members for 2 one-week meetings. Teams should aim to achieve a good gender balance and a good mix of seniority levels among the core membership. Inter-disciplinary expertise is strongly encouraged.

Approved International Team projects are granted additional in-kind support (see Sect. 6) to enable the inclusion of early-career researchers (ECRs). ECRs can also co-lead International Teams or be nominated as core members from the outset. Nominating ECRs as core Team members does not impact on the number of additional ECRs that can be nominated after project acceptance.

4. Selection Criteria

The main requirements for the acceptance of International Team proposals will be (i) the significance of the research proposed; (ii) the ability of Team members to successfully complete the project within 2 years' time; the diversity of Team members in terms of multi-disciplinary expertise, geographic distribution, career stage, and gender balance; and (iii) the added value of ISSI and/or ISSI-BJ, and the appropriate use of ISSI/ISSI-BJ resources.

The ISSI Science Committee will assess Team proposals via a 2-stage process, of which the first involves an anonymous review of the underlying science case. When evaluating proposals, the Science Committee will assess to what extent the following criteria are met:

Science:

• <u>Scientific impact</u> – Is this an important question in the field? Will the outcome of the project address long-standing questions or influence the future direction of the field in a multi-disciplinary context? Will the project result in an incremental improvement to existing work, or could it lead to a step change in the relevant field?



- <u>Timeliness</u> Is there a good reason for doing this work now? (E.g. new data coming from a space mission, new developments in a rapidly evolving field.)
- <u>Innovation</u> Does the International Team address a novel topic, or propose to synthesise existing knowledge in a new way, e.g. through multi-disciplinary expertise? Will it develop a new approach?
- <u>Feasibility</u> Is a work plan included and can all associated tasks be completed in the time available?
- <u>Scientific legacy</u> Will the project develop and provide to the community, e.g., techniques, codes, and datasets with long-lasting impact? Is there any overlap with currently active teams (see www.issibern.ch/scientific-opportunities/international-teams & www.issibj.ac.cn/program/it)?
- <u>Science related to space data</u> Are Team activities aligned with the ISSI remit of supporting (a) research that directly uses existing space data, and/or (b) theory with direct application to existing data? Projects involving both ground- and space-based data are also eligible for support.

Team & ISSI/ISSI-BJ Resources:

- <u>Resources requested</u> Are the demands on ISSI and/or ISSI-BJ realistic and compatible with the guidelines in this proposal call?
- <u>Geographic diversity</u> Are the International Team members affiliated with a minimum of 4 different countries incl., for ISSI or joint ISSI/ISSI-BJ Teams, at least one member from an ESA member state?
- <u>Community representation</u> Is Team membership balanced, or is it at least representative of the relevant community, in terms of gender, minorities/underrepresented groups, career stage, etc. ...
- <u>Added value of ISSI</u> What are the unique attributes of ISSI and/or ISSI-BJ that enable the International Team to achieve their science goals?
- <u>Competence</u> Does the International Team combine sufficient subject-specific expertise, and if relevant multi-disciplinary expertise, to carry out the proposed research effectively?
- <u>Range of expertise</u> Does the International Team combine the right breadth of skills and knowledge to address the main science questions and implement the work plan? Do the Team members have a sufficiently broad knowledge and expertise to be able to have a productive discussion?
- <u>Team member roles & responsibilities</u> *Is the contribution of each Team member outlined clearly in the proposal? Have all Team members committed to attending Team meetings?*

5. Content of the Proposal

In preparation for blind review by the ISSI Science Committee, the science justification section must be anonymised. Guidelines and examples to help with this are provided here. Names of files submitted as part of the proposal should not reveal the identity of applicants.

The science justification ("Part A"; max. 4 pages of single-sided A4 paper, excluding references) should include:

- Abstract (max. 250 words) summarizing all key aspects of the project in plain language accessible to non-specialists
- Scientific rationale
- Project workplan incl. number, duration and timing of the meetings planned
- List of the expected outputs e.g., scientific papers, reviews, books, software, etc.
- Financial support requested from ISSI and/or ISSI-BJ (see Sect. 6)



- Facilities required (only for special requests, see Sect. 6)
- References (to be placed at the end, but not counting toward the 4-page limit)

Applicants should also prepare ("Part B"; max. 2 pages of single-sided A4 paper):

- Statement re. the added value of ISSI/ISSI-BJ for achieving the science goals of the Team
- Description of the expertise of each core Team member and their respective roles in/contributions to the project

To this part B of the proposal, applicants should then append (i) a 2-page CV for the Team leader(s) and (ii) a 1-page CV for all further Team members. To ensure a common format as the basis for all proposal evaluations this template should be used for all CVs.

An \geq 11pt font should be used throughout. The proposal must be submitted by the International Team leader(s) via the on-line submission interface. As part of the submission process, applicants must compile a list of confirmed core Team members (including affiliations and e-mail addresses) and provide basic community representation data for their Team (geographical/institutional distribution, career stage distribution and gender balance).

At submission, applicants are required to declare any AI-generated or AI-enhanced text in the proposal.

6. ISSI/ISSI-BJ support

Financial support:

For the duration of Team meetings in Bern or Beijing, ISSI/ISSI-BJ will support *core* Team members through the provision of accommodation (incl. breakfast), and a contribution to local expenses (in form of a per diem for ISSI; through on-site lunch meals at ISSI-BJ).

Upon proposal approval, *early-career researchers* (ECR, max. +2 years post-PhD award) may additionally be nominated to the Team (see also Sect. 3). As a guideline, ISSI/ISSI-BJ support for these additional ECR Team members will typically constitute ~20% of the person-weeks allocated to the International Team for core members. ECRs receive the same contribution towards their local expenses as core members.

ISSI/ISSI-BJ will cover travel expenses for (one of) the Team leader(s). In well justified cases, Team leaders may transfer their travel reimbursement to another Team member.

Meeting infrastructure and logistic support:

ISSI and ISSI-BJ provide: meeting rooms including professional *audio and video systems for hybrid meetings*; white boards; Wi-Fi internet access; electrical plug adaptors; the ISSI/ISSI-BJ coffee machine; and (only at ISSI) printers and shared desktop workstations. ISSI Teams can make use of the ISSI On-Line Collaboration Apps throughout the duration of their project.

Team members with childcare needs, reduced mobility or other special needs can contact ISSI and ISSI-BJ to discuss which arrangements might be made during meetings.



<u>Core membership management</u>:

Any change to the core membership should be avoided. In the exceptional case where replacing a core member is justified, Team leaders must send ISSI/ISSI-BJ a CV of the new candidate and a short description of their anticipated contribution to the Team.

Additional experts invited by the team leader are expected to contribute to the work of the team at no cost to ISSI/ISSI-BJ.

International Team publications:

ISSI/ISSI-BJ does not fund page charges for journal papers submitted by International Teams. However, ISSI and ISSI-BJ require that papers published as a result of Team activities include an acknowledgement of ISSI's and/or ISSI-BJ's support.

7. Duties of the International Team Leader

After selection, the successful International Team leader shall:

- Finalise the schedule of team meetings in collaboration with ISSI or ISSI-BJ
- Establish the list of attendees ahead of each meeting so that appropriate hotel block bookings can be made, and facilities allocated at ISSI or ISSI-BJ
- Set up and maintain a website as per ISSI/ISSI-BJ guidelines, and add content describing project aims, the membership of the International Team and its schedule of activities
- Acknowledge ISSI/ISSI-BJ support in papers published in the framework of the project
- Inform ISSI/ISSI-BJ whenever new papers (which must include an acknowledgement to ISSI and/or ISSI-BJ) related to the International Team are published. All publications will be listed in ISSI and/or ISSI-BJ's annual reports and these publication lists are used to provide metrics to the institutional partners and funding agencies
- Commit to contributing to ISSI's and/or ISSI-BJ's outreach activities as related to the outcomes of the International Team's activities, e.g., by providing updates on scientific highlights or new publications
- After completion of Team activities, compile a final report describing the outcomes of the project (see Section 8)

8. Reporting on Team Outcomes

ISSI/ISSI-BJ (and their institutional partners and funding agencies) consider the final report to be of prime importance for assessing the quality and potential impact of International Team results. Final reports from Teams are a key component for the evaluation of the standard of ISSI and ISSI-BJ's performance and scientific output.

The final report consists of:

• Summary of the project outcomes (max. 350 words), outlining the key findings and their overall significance in plain language accessible to non-specialists



- Complete publication list
- Max. 2 highlight slides with the key project results (illustrated via figures & text)
- Complete Team webpage, to be kept up-to-date with, e.g., newly accepted Team publications also after formal project completion.

All elements of the final report should be sent to ISSI and/or ISSI-BJ no later than 6 months after the final meeting of the International Team.

9. Schedule and Decision

- January 13, 2025: Release of proposal call
- March 13, 2025: Proposal submission deadline Proposals must be submitted via the on-line submission form

http://www.issibern.ch/submitproposal/

Please submit your proposal by midnight in your local time zone.

• June 2025: Announcement of the outcome of the proposal review process

For further information and questions please contact:

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