## The COSPAR Program of Capacity-Building Workshops

#### Introduction

COSPAR has a regular program of Capacity-Building Workshops which are held at a rate of about 3-5 workshops per year. The main objective is to encourage the scientific use of space data by scientists in developing countries. In particular, in view of the large number of extensive archives of data from past and current space missions, and the ready access to these and the associated analysis software via the internet, the typical workshop aims to provide a highly practical training in the use of one or more of these, based on current missions. However, any training activity related to science covered by one of the COSPAR Scientific Commissions is eligible for support. A list of past and future approved workshops can be found at <a href="https://cosparhq.cnes.fr/events/cospar-capacity-building-workshops/">https://cosparhq.cnes.fr/events/cospar-capacity-building-workshops/</a>.

This program is not directed, but relies on proposals from scientists of standing within the international space science community. Usually, the proposed workshop is expected to meet some general guidelines (see below). While COSPAR is ready to provide substantial funding, it is also expected that the host country provide a similar amount. It is hoped that the workshop will be related to either a space project, or some other strategic scientific objective in the host country, but this is by no means always possible.

COSPAR is also willing to co-sponsor workshops with other major agencies, provided these fit the general character of this program.

#### The character of the workshop

These guidelines are intended to be illustrative rather than prescriptive. There can be many good ideas that do not fit these guidelines precisely.

The typical duration of a workshop is 2 weeks. The most important objective is that participants are able to use the results of attending to improve the quality of their research after they return home. For this reason, the workshop should provide a genuinely practical training, together with the possibility of some subsequent guidance. The latter may take the form of access to a help desk operated by the space mission, or email access to lecturers. There is a Fellowship program to assist in the development of joint research projects (<a href="https://www.astro.rug.nl/~mariano/COSPAR/">https://www.astro.rug.nl/~mariano/COSPAR/</a>; see also below).

The workshop should be targeted at a range of participants from final year postgraduate students to young university faculty members in developing countries, usually within a broad geographical region. Practical requirements will often limit the workshop capacity to 25-35 "students" *plus* the lecturing team

About one-half of the workshop time is usually devoted to a project which, whilst it may involve some element of collaboration with other participants, is on a topic tailored to the needs and interests of each participant, including their current research. The rest of the time will be devoted to lectures on science, software or the missions as required. It is also often good to include something on applying for guest observer time where this is appropriate.

Each participant will be allocated to one of the lecturing team who will act as project advisor for the duration of the workshop, and the participant will give a poster or verbal presentation of his or her results on the last afternoon of the workshop. Typically, the ratio of lecturers to "student" participants will be about 1 to 3 and lecturers should be strongly encouraged to stay for the entire workshop to provide continuity of contact. This project is often the "seed" for subsequent collaborative research.

If the project is based on data analysis, a computer laboratory with good internet access and large enough to provide a dedicated computer for each participant should be available. It is desirable that the lecturing facilities should be separate from this laboratory. (If deemed appropriate and feasible, instead of using computers provided by the venue, the participants may bring and use their own laptops.)

All of the participants, both the lecturing team and the "students", should be accommodated together in a hotel or guesthouse so as to maximise the benefits of casual interactions and to build up good friendly contacts. The accommodation needs to be of a suitable standard to attract good lecturers from a range of backgrounds to stay for the duration of the workshop.

There will be no registration fee. On the contrary, all participants should be offered free board and lodging, and travel grants should be available for those, particularly the more junior, "students" who cannot obtain support from their home countries. The objective should be to ensure that no well-qualified applicant is unable to attend for financial reasons. It will of course be necessary to offer all lecturers full travel costs though experience shows that agencies such as ESA and NASA will often offer to cover this cost for their staff or other lecturers describing their missions.

Because of the cost, all applicants must apply and pass through an objective, independent selection process for which an international panel should be set up. This selection should be based on scientific merit, taking fully into account the likelihood that long-term research will result from attendance at the workshop. "Students" do not need to come from countries that are national members of COSPAR (though the benefits of COSPAR membership could be stressed at the workshop!).

Every effort should be made to build an atmosphere in which the lecturing team feels willing to provide at least minimal technical advice to participants when they have returned home after the workshop and perhaps also to set up collaborative research projects. It is often the case that these arise naturally out of the projects, and the COSPAR Fellowship program exists to facilitate such research.

At the end of the workshop we expect to receive a report of the workshop, including a copy of the final program, highlights of the workshop, a group (and other) photo(s), etc., plus a detailed financial report.

## **Statement of Principles**

We expect CBW organisers to take COSPAR's **Statement of Principles** into account when preparing a proposal.

# The Fellowship program

A COSPAR fellowship program that enables short visits by workshop participants to other institutions to continue their work is also part of all COSPAR Capacity-Building workshops. More information about this program is available at <a href="https://www.astro.rug.nl/~mariano/COSPAR/">https://www.astro.rug.nl/~mariano/COSPAR/</a>. As part of organizing a workshop, we ask that one person be designated the workshop's fellowship contact; they will be responsible for advertising the opportunity to the students and helping to evaluate applications for fellowships after the workshop. Any questions about this can be directed to the Chair of the Fellowship program, Mariano Mendez (mariano@astro.rug.nl).

## Selection procedure for workshops

If you would like to propose a workshop, please complete and return the <a href="mailto:application form">application form</a>. Invitations to submit workshop proposals will also be made to COSPAR Scientific Commissions at each COSPAR Scientific Assembly. The Panel for Capacity Building (PCB) is responsible for operating the program, and proposals may be submitted to either the Chair (Carlos Gabriel, <a href="mailto:juan.carlos.gabriel@gmail.com">juan.carlos.gabriel@gmail.com</a>) or to the Executive Director of COSPAR (<a href="mailto:cospar@cosparhq.cnes.fr">cospar@cosparhq.cnes.fr</a>) at any time. However, the submitted proposals will be discussed in two yearly terms: end of March for workshops to take place at any point in the following year, end of September for workshops to take place between July of the following year and June a year later. One of the 6 members of the PCB (5 Vice-Chairs plus Chair) will be assigned to work with the proposers on each proposal if it is accepted.

The criteria for selection include:

Science is within COSPAR remit?

*Is there space data involved?* 

Missions involved are current?

*Missions involved are producing exciting results?* 

Missions have open Guest Observer programs?

Quality of Archives (size, free, accessible).

Availability and quality of free software for analysis.

*Is this archive supported by a "help desk"?* 

*Does the workshop have regional character?* 

Data is suitable for research in the region.

Likelihood that workshop can lead to active research.

Likelihood that workshop will strengthen across-country links within region.

*Size of relevant community in region and/or host country.* 

What is the likely educational status of host country applicants (MSc or PhD students, post doctoral)? Standing of proposer/team.

Quality of venue if known (internet bandwidth, number of computers, audio-visual facilities).

Status of host country funding.

Can host country funds be used to support applicants from other countries?

Likely funding from international sources.

*Relationship to host country or regional projects/initiatives/science policy.* 

Not all of these will be applicable in every case, but still this gives an idea about what will be looked for in a proposal.

If the proposal is pre-approved by the PCB, there will be a visit to the host country by the responsible PCB Vice-Chair, to meet with the proposers and make detailed plans and formulate the necessary agreement, including the financial agreement, with COSPAR. These will then be submitted to the Executive Director for approval.

Last updated: 8 July 2025