Max Planck Society Call for APEX Proposals

Summary

The MPIfR has access to 45% of the observing time at the Atacama Pathfinder Experiment (APEX) telescope. Half of this time will be made available to the Max Planck Society (MPS) community, including MPIfR, and also to German universities and research institutes, all on a competitive basis.

In this call, proposals for APEX observing requests for the period from 20 March to 21 August 2015 are solicited. An additional call for the second half of the year is foreseen in August.

Note that there have been several large programmes that are performed as partnerships between the MPIfR and other institutes. For these, the non-MPIfR partners have successfully applied for ESO time. Since Germany is a major ESO member and in view of the heavy over-subscription of Max Planck Society time, we encourage all interested groups to consider applying alternatively for ESO observing time. In the past, such proposals to ESO have benefited from matching offers of MPS time. To help coordination, please contact the APEX Board chairman, Prof. Karl Menten, in case you are interested in such a multi-institute programme.

Telescope and Instruments

APEX is a 12m submillimeter telescope situated at an altitude of 5107m on Llano de Chajnantor in Chile, and is a collaboration between the MPIfR Bonn, the European Southern Observatory and the Onsala Space Observatory. For details on the facility and its operation we refer to http://www.apex-telescope.org.

The facility instruments available will be the ~300 pixel 870 µm bolometer camera LABOCA and a suite of heterodyne receivers in selected atmospheric windows. Fast Fourier Transform (FFT) spectrometers covering 4 GHz of bandwidth with 76 kHz spectral resolution do serve as heterodyne backends for the heterodyne facility instruments.

In addition, the PI heterodyne array CHAMP+ and the FLASH-345/460 PI receivers (for both contact Rolf Güsten [guesten@mpifr-bonn.mpg.de]) will be available on a collaborative basis. Observing requests for PI instruments will be on a shared risk basis and require prior coordination with and approval by the PI, who will also provide details of the PI instrument performance. Details on the FLASH and CHAMP+ performance and observing modes can be found at http://www3.mpifr-bonn.mpg.de/div/submmtech/index.html.

Observing Time Estimates

Observing time estimates for the facility instruments should use the observing time calculators available on the APEX web site: http://www.apex-telescope.org/observing. Note that there is also an estimator for On-The-Fly mapping available which should be used.

Proposal Submission Guidelines
Proposals should be submitted as a single PDF file using the templates provided at http://www.mpifr-bonn.mpg.de/apex/proposals. They should contain as a minimum the following information:

- Principal Investigator and co-Investigators (+ institute and PI email)
- Abstract
- Scientific Justification (Up to 2 pages plus figures and tables)
- Source list (R.A., Decl., equinox J2000)
- Required weather conditions in terms of PWV
- Observing time estimates, based on the above mentioned time estimator
- Names of experienced observers willing to assist with the observations (observation setups and remote or at the site assistance)
- In case of multi-instrument proposals, a breakdown of time for each instrument is requested.

In addition, information is required on: previous observing requests at APEX (including MPS/ESO/OSO, and Chilean time) and a list of all related publications reporting APEX-data.

Proposals will be assessed on grounds of scientific merit. In inter-agency proposals it shall be stated how much time will be requested /has been granted from another APEX partner.

In general, it is expected that successful proposers of larger programs will support the observations in Chile. For shorter proposals for facility instruments, remote observing from Bonn or service observing by the APEX staff is an option. Please indicate your preference on the proposal form. No travel support can be provided by the MPIfR. Proposals for PI instruments will be executed by the PI teams, but – depending on the actual load – support at the site may be requested. A health certificate is required for observers interested to participate at the high altitude site (for information, contact the APEX Project Scientist Friedrich Wyrowski [wyrowski@mpifr-bonn.mpg.de]).

**Deadline for submission of proposals**

All proposals should be sent to apex@mpifr-bonn.mpg.de by Friday, 13 February 2015 (18:00 CET).