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Call for proposals – Deadline October 2, 2019, UT 15:00

by Alex Kraus

Observing proposals are invited for the Effelsberg 100-meter Radio Telescope of the Max Planck Institute for Radio Astronomy (MPIfR).

The Effelsberg telescope is one of the World's largest fully steerable instruments. This extreme-precision antenna is used exclusively for research in radio astronomy, both as a stand-alone instrument as well as for Very Long Baseline Interferometry (VLBI) experiments.

Access to the telescope is open to all qualified astronomers. Use of the instrument by scientists from outside the MPIfR is strongly encouraged. The institute can provide support and advice on project preparation, observation, and data analysis.

The directors of the institute make observing time available to applicants based on the recommendations of the Program Committee for Effelsberg (PKE), which judges the scientific merit (and technical feasibility) of the observing requests.

Information about the telescope, its receivers and backends and the Program Committee can be found at https://www.mpifr-bonn.mpg.de/effelsberg/astronomers (potential observers are especially encouraged to visit the wiki pages!).

Observing modes

Possible **observing modes** include spectral line, continuum, and pulsar observations as well as VLBI. Available backends are several FFT spectrometers (with up to 65536 channels per subband/polarization), a digital continuum backend, a number of polarimeters, several pulsar systems (coherent and incoherent dedispersion), and two VLBI terminals (dBBC and RDBE type with Mk6 recorders).

Receiving systems cover the frequency range from 0.3 to 96 GHz. The actual availability of the receivers depends on technical circumstances and proposal pressure. For a description of the receivers see the web pages.

Please note, that observing proposals for the new **Phased-Array-Feed** cannot be accepted yet – the system is still being commissioned. The new 20mm receiver is fully usable, however.

How to submit

Applicants should use the NorthStar proposal tool for preparation and submission of their observing requests. North Star is reachable at https://northstar.mpifr-bonn.mpg.de.

For VLBI proposals special rules apply. For proposals which request Effelsberg as part of the European VLBI Network (EVN) see: http://www.evlbi.org/proposals/.

Information on proposals for the Global mm-VLBI network can be found at http://www3.mpifr-bonn.mpg.de/div/vlbi/globalmm/index.html.

Other proposals which ask for Effelsberg plus (an)other antenna(s) should be submitted twice, one to the MPIfR and a second to the institute(s) operating the other telescope(s) (eg. to NRAO for the VLBA).

The following deadline will be February 3, 2020, 15:00 UT.

RadioNet Transnational Access Programme

by Alex Kraus

RadioNet (http://www.radionet-org.eu) includes a coherent set of Transnational Access (TA) programs aimed at significantly improving the access of European astronomers to the major radio astronomical infrastructures that exist in, or are owned and run by, European organizations.

Astronomers who are based in the EU and the Associated States but are not affiliated to a German astronomical institute, may also receive additional aid from the Transnational Access (TA) Program of 'RadioNet'. This will entail free access to the telescope, as well as financial support of travel and accommodation expenses for one of the proposal team members to visit the Effelsberg telescope for observations.

The Transnational Access program is one of the activities of "RadioNet", an Integrated Infrastructure Initiative (I3) funded under the ECs Framework Program Horizon2020, that has pulled together all of Europe's leading astronomy facilities to produce a focused, coherent and integrated project that will significantly enhance the quality and quantity of science performed by European astronomers.

One - in exceptional cases more - scientists who are going to Effelsberg for observations can be supported, if the User Group Leader (i.e., the PI - a User Group is a team of one or more researchers) and the majority of the users work in (a) country(ies) other than the country where the installation is located. Only user groups that are allowed to disseminate the results they have generated under this program may benefit from the access.

After completion of their observations, TNA supported scientists are required to submit their feedback through the TNA web pages.

Replacement of an Elevation Gear

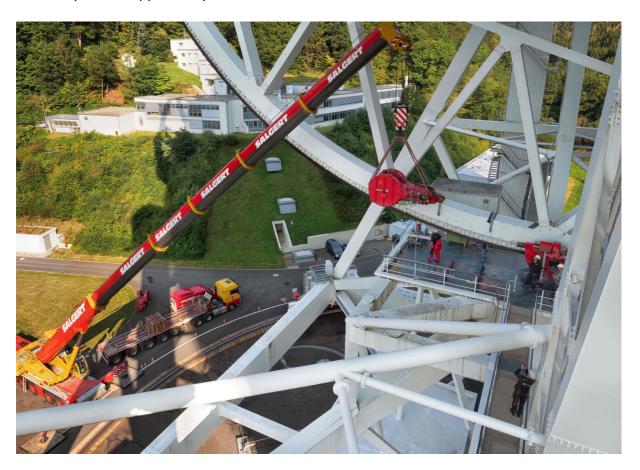
by Alex Kraus

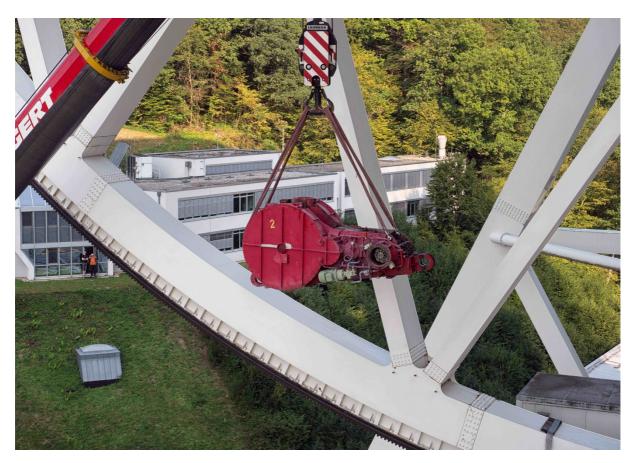
The elevation-gear no 2 had to be taken off the telescope between August 23 and 26, 2019. After nearly 50 years of operation an extended maintenance is necessary, which will be done at the manufacturer of the gear.

In order not to interrupt observations for too long, a spare-gear was installed. As one of these gears weighs about 8 tons, heavy equipment was necessary for getting the old gear off the telescope and lifting the replacement to the elevation-drive in 20 meters height.

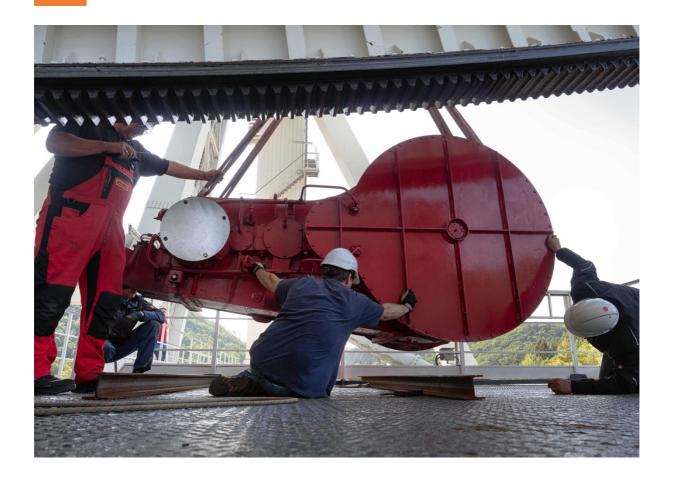
Due to the perfect preparation by the telescope staff, the replacement was completed within four days and observations could re-start on time.

The revised gear is expected back in Effelsberg in late November and will be installed during the next possible opportunity.









Awards and recognition for research with Effelsberg - spanning generations

by Michael Kramer

During the recent annual meeting of the Max-Planck-Society (MPG), two scientists were honoured, both deeply involved in research with the Effelsberg 100-m telescope.

Richard Wielebinski, retired Director at the MPIfR, received the MPG badge of honour for 50 years of membership in the Max-Planck Society. It marks his anniversary of having been appointed Director at the MPIfR in 1969. As such, in the following 50 years, his research focussed on utilising the 100-m telescope - which was just being under construction at the time - in observations of pulsars and cosmic magnetic fields. Indeed, the first ever publication reporting observations with the 100-m telescope reported on pulsar observations made by Prof Wielebinski.



At the same meeting, **Andrew Cameron** was awarded with the Otto-Hahn medal of the Max Planck Society. With the medal, the MPG recognises early career researchers for outstanding scientific achievements in connection with their doctoral thesis. His thesis, entitled "Innovative Pulsar Searching Techniques or Fantastic Pulsars and How to Find Them" made extensive usage of Effelsberg, e.g. in order to find the timing solution for the binary pulsar with the largest acceleration known

(see: https://ui.adsabs.harvard.edu/abs/2018MNRAS.475L..57C/abstract).

In the name of the whole institute we would like to congratulate both to their achievements.

