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European VLBI Network
Call for Proposals
Deadline 1st June 2017

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This text is also available on the web at
http://www.chalmers.se/en/centres/oso/radio-astronomy/vlbi/Documents/EVN_CfP.txt

Observing proposals are invited for the EVN, a VLBI network of radio telescopes spread throughout Europe and beyond, operated by an international consortium of institutes (http://www.evlbi.org/).

The observations may be conducted with disk recording (standard EVN) or in real-time (e-VLBI).

The EVN facility is open to all astronomers. Use of the Network by astronomers not specialised in the VLBI technique is encouraged.

The Joint Institute for VLBI ERIC (JIVE) can provide support and advice on proposal preparation, scheduling, correlation and analysis. See EVN User Support at http://www.jive.eu.

Future Standard EVN Observing Sessions (disk recording)

2017 Session 3	Oct 19 - Nov 09	18/21 cm, 6 cm ...
2018 Session 1	Feb 22 - Mar 15	18/21 cm, 6 cm ...
2018 Session 2	May 24 - Jun 14	18/21 cm, 6 cm ...
2018 Session 3	Oct 18 - Nov 08	18/21 cm, 6 cm ...

Proposals received by 1st June 2017 will be considered for scheduling in Session 3, 2017 or later. Finalisation of the planned observing wavelengths will depend on proposal pressure.

Future e-VLBI Observing Sessions (real-time correlation)

2017	Sep 19 - Sep 20 (start at 13 UTC)	18/21 cm, 6 cm, 5 cm or 1.3 cm
2017	Oct 10 - Oct 11 (start at 13 UTC)	18/21 cm, 6 cm, 5 cm or 1.3 cm
2017	Nov 14 - Nov 15 (start at 13 UTC)	18/21 cm, 6 cm, 5 cm or 1.3 cm
2017	Dec 14 - Dec 15 (start at 13 UTC)	18/21 cm, 6 cm, 5 cm or 1.3 cm

Please consult the e-VLBI web page at
http://www.evlbi.org/evlbi/e-vlbi_status.html to check for possible updates, and for the available array.

Successful proposals with an e-VLBI component submitted by the June 1 deadline will be considered for scheduling in the above e-VLBI sessions starting from September 19, 2017.

Note that only one wavelength will be run in each e-VLBI session, selected based on proposal priorities.

See http://www.jive.eu/jivewiki/doku.php?id=evn:guidelines for details concerning the e-VLBI observation classes and observing modes.

New Features for the Next Standard EVN and e-VLBI Sessions

The Kunming 40 m telescope is an affiliated EVN station situated on Phoenix Mountain, about 10 km east of the city of Kunming, China. The telescope may be requested on a best efforts basis for EVN disk recording observations at 13, 6, 5 and 3.6 cm wavelengths.

e-VLBI at 2 Gbps is available at 6 cm and 1.3 cm at a subset of the EVN telescopes. The remaining telescopes will observe at 1 Gbps or highest possible bit-rate (mixed mode observation). The current status is given here:

http://www.evlbi.org/evlbi/e-vlbi_status.html

Disk recording at 2 Gbps is available at 6 cm, 3.6 cm, 1.3 cm and 0.7 cm at a subset of the EVN telescopes. The remaining telescopes will record at 1 Gbps (mixed mode observation). The current status is given here:

https://deki.mpifr-bonn.mpg.de/Working_Groups/EVN_TOG/2Gbps

Use of this data rate should be clearly justified and limited to projects which really need it.

Please consult http://www.evlbi.org/evlbi/e-vlbi_status.html and the EVN User Guide http://www.evlbi.org/user_guide/user_guide.html for updates on the current EVN and e-VLBI array, availability of different stations per observing band and for the dates of the e-VLBI observing sessions.

Global VLBI Proposals

Global proposals can be proposed up to 2 Gbps including VLBA, GBT and the JVLA.

Some modes may require different bandwidth channels at different telescopes; correlation at JIVE can handle this.

JIVE support staff will work with Socorro to assist you during the scheduling process of such observations.

Global observations will be correlated at the SFXC correlator at JIVE (default) or at the DiFX correlator in Bonn or at the DiFX correlator in Socorro (if appropriate justification is given in the proposal).

RadioAstron Observations

Proposals requesting the EVN as ground array support or correlation at JIVE for RadioAstron AO5 observations in the period: 19 October 2017 to 30 June 2018, may be submitted at this deadline.

Large EVN Projects

Most proposals request 12-48 hrs observing time. The EVN Program Committee (PC) also encourages larger projects (>48 hrs); these will be subject to more detailed scrutiny, and the EVN PC may, in some cases, attach conditions on the release of the data.

Availability of EVN Antennas

The SRT will be offline for at least the entire 2017 and VLBI operations are expected to restart at some time in 2018. Exact date will be communicated at a later stage when closer to resume operations.

The Irbene 32 m telescope is a new EVN station located 30 km north of Ventspils, Latvia. The telescope may be requested for EVN disk recording observations at 18 (single pol., RCP, uncooled receiver), 6, 5 and 3.6 cm wavelengths.

The WSRT will be participating with a single telescope, equipped with dual circular polarization receivers. The frequency coverage will remain the same. Proposers who wish to use the EVN Calculator, should select "W1" instead of "Wb".

Tm65 is the 65 m telescope at Tianma, about 6 km away from the 25 m Seshan telescope (Sh). The 2-letter abbreviation for Tm65 telescope is T6. Both of these telescopes can observe at 18, 13, 6, 5, 3.6, and 3.6/13 cm. Tm65 can also observe at 21 cm. Tm65 is the default telescope; Sh will be used if the Tm65 is not available for some reason. If you select both, you should also discuss the motivation for the very short baseline in the proposal.

Integration of e-MERLIN Telescopes into the EVN

Integration of e-MERLIN outstation antennas into the EVN is now possible following recent software upgrades on the e-MERLIN correlator at Jodrell Bank on a shared risk basis. EVN experiments can now include multiple e-MERLIN outstation antennas in addition to an antenna at Jodrell Bank. The total recorded bandwidth for the outstations will be limited to 1 Gbps but can be divided between 1, 2 or 4 e-MERLIN antennas. PIs of proposals should indicate in the scientific justification which e-MERLIN antennas they wish to record. These data will then be available for correlation with all other EVN stations in mixed mode, providing a fully integrated additional set of short spacing EVN data for the first time. For example, within e-MERLIN, the baseline coverage from Jb + Da, Kn, De, and Cm would span separations of 11 to 220 km.

Proposers can alternatively still request a full bandwidth e-MERLIN observation for high sensitivity lower surface brightness imaging where the e-MERLIN telescopes are correlated at JBO. This contemporaneous mode will be offered as a fall back to simultaneous observations

For any technical queries contact: vlbi@jb.man.ac.uk

Use of Korean VLBI Network Antennas

The Korean VLBI Network (KVN) is an Associate Member of the EVN. KVN telescopes may be requested for EVN observations at 1.3 cm and 7 mm wavelengths. For more details regarding the KVN, see: http://radio.kasi.re.kr/kvn/main_kvn.php

Use of Australian VLBI Network Antennas

Some Australian Long Baseline Array (LBA) time will be made available for simultaneous scheduling with the EVN, thus enabling the possibility of joint LBA/EVN observations. The easternmost stations of the EVN are in a similar longitude range to the LBA telescopes, and for sources in equatorial regions, baselines to western European stations are also achievable. Joint LBA time is likely to be heavily oversubscribed, and authors are requested to note whether they are prepared to accept scheduling without LBA antennas being present.

Any proposals for joint EVN+LBA observations submitted to the EVN by its 1 June 2017 deadline should also be submitted to the LBA by their (provisional) 15 December 2017 deadline and will first be eligible for scheduling in EVN Session 1/2018.

For more details regarding proposing time on the LBA, see:
http://www.atnf.csiro.au/observers/apply/avail.html
&
http://www.atnf.csiro.au/vlbi/index.html

EVN+LBA observations should be possible at all principal EVN wavebands from 21 cm to 1.3 cm.: See: (http://www.evlbi.org/user_guide/freq_cov.html) and http://www.evlbi.org/user_guide/EVNstatus.txt.

Out of Session Observing

Out-of-Session observing time (up to a maximum of 144 hours/year), is now available to all proposals (disk recording or e-VLBI).

Proposals requesting Out-of-Session observing time must provide full scientific (and technical if appropriate) justification as to why observations must be made outside standard sessions.

Out-of-Session observing blocks should be no less than 12 hours in duration (although individual observations can be shorter), and occur no more than 10 times per year.

Proposals should specify which dates/GST ranges are being requested and indicate the minimum requirement in terms of numbers of telescopes (and any particular telescopes).

Proposals will only be considered for dates occurring after the regular EVN session that follows EVN proposal review.

Observations requiring much shorter lead times should be submitted as "Target-of-Opportunity" (ToO) proposals.

Joint observations with other facilities

For joint observations with other facilities, e.g., EVN+XMM, separate proposals should be submitted to the EVN and to the other facility. Such proposals will be considered by the EVN PC on a case-by-case basis.

How to Submit

All EVN and Global proposals (except ToO and short-observation, see http://www.jive.eu/jivewiki/doku.php?id=evn:guidelines) must be submitted using the NorthStar on-line proposal submission tool. Global proposals will be forwarded to NRAO automatically and should not be submitted to NRAO separately.

New proposers should register at http://proposal.jive.eu.

Proposals must include the following sections:

1. Science & technical justification
2. Figures, tables and references (optional)

These sections shall be submitted as a single PDF document. The total length of this document is limited to 4 pages (A4 or US Letter format), with a font size no smaller than 11 points. Proposers are free to adjust the length of the various proposal sections within this overall length limit.

The strongly recommended breakdown is 2 pages for the Science & technical justification and 2 pages for Figures, tables and references.

Figures and tables may be interleaved with the science justification, so that e.g. figures appear close to the location in the text where references are made to them.

When specifying requested antennas from the LBA, please specify 'LBA' under the "other" row in the telescope-selection box - this selects all that are available for joint observations.

The deadline for submission is 23:59:59 UTC on 1st June 2017.

Additional information

Further information on EVN, EVN+MERLIN, Global VLBI and e-VLBI observations, and guidelines for proposal submission are available at: http://www.jive.eu/jivewiki/doku.php?id=evn:guidelines

The EVN User Guide (http://www.evlbi.org/user_guide/user_guide.html) describes the network and provides general information on its capabilities.

The current antenna capabilities can be found in the status tables. For the standard EVN see http://www.evlbi.org/user_guide/EVNstatus.txt

For the e-EVN array see http://www.evlbi.org/evlbi/e-vlbi_status.html

The On-line VLBI catalogue (http://db.ira.inaf.it/evn) lists sources observed by the EVN and Global VLBI.

A selection of recent highlights is presented here: http://www.jive.eu/jivewiki/doku.php?id=evn:evn_science

A selection of recent refereed EVN publications is presented here:

http://www.jive.eu/jivewiki/doku.php?id=evn:evn_publications