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1) Message from the EVN chairman

Dear Colleagues,

With the EVN, EVLA A-array and e-MERLIN proposal deadlines all coming together, and LOFAR deadlines approaching it has been a busy time for all of us, and there's no doubt that this will be an exciting time for radio astronomy. Demand for the EVN has continued to increase over the last 5 years and shows no sign of slowing down.

The next EVN Symposium and Users' Meeting will be held on 9-12 October 2012 in Bordeaux and we can look forward to seeing many new results in what promises to be an exciting conference in the most convivial surroundings.

Congratulations to the Radioastron mission, who announced that fringes have been successfully observed at 6cm and 18cm, and congratulations also to academician Nikolai Kardashev with the award of the 2012 Grote Reber Gold Medal for his innovative and significant contributions to radio astronomy.

The EC-supported RadioNet3 has officially started and will hold a kick-off meeting in Bonn at the end of February. Thanks to Mike Garrett who successfully coordinated the previous RadioNet programme and thanks to the new RadioNet team in Bonn, especially Anton Zensus and Izabela Rottman, who are leading the current RadioNet which builds on the success of the two preceding programmes under FP6 and FP7 and also takes a leap forward as it includes facilitation of research with ALMA via a dedicated NA, and 4 pathfinders for the SKA in its TNA Program. RadioNet provides significant support for the EVN through the TNA programme and through the Joint Research activities. Although it's been a mild winter across Europe so far, skies cleared, temperatures dropped and the stars shone for 'Stargazing Live' a 3-night astronomy extravaganza by the BBC hosted from Jodrell Bank a couple of weeks ago and watched by an average of 3.1M viewers and with significant participation from across Europe via the BBC website. Such events and the huge public interest remind us of the wider impact of our work and its inspirational power for a wide cross section of society.

Finally, it is with great sadness that we note the passing of Steve Rawlings, who died on 11 January. Steve's contributions to radio astronomy in general and the SKA in particular were enormous and his generosity of spirit and ideas with all those whom he met, taught and collaborated with were such that he will be greatly missed by so many of us.

Simon Garrington

2) Call for EVN Proposals

European VLBI Network

Call for Proposals

Deadline 1 February 2012

This call for proposals is also available on the web as [text](#) .

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 specialized in VLBI techniques is encouraged.

The Joint Institute for VLBI in Europe (JIVE) can provide support and advice on project preparation, scheduling, correlation and analysis. See EVN User Support at <http://www.jive.nl>

Future Standard EVN Observing Sessions (disk recording)

- 2012 Session 1 Feb 23 - Mar 15 18/21cm, 6cm ...
- 2012 Session 2 May 24 - Jun 12 18/21cm, 6cm ...
- 2012 Session 3 Oct 18 - Nov 08 18/21cm, 6cm ...

Proposals received by 1 February 2012 will be considered for scheduling in Session 2, 2012 or later. Finalisation of the planned observing wavelengths will depend on proposal pressure.

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

- 2012 Feb 07 - Feb 08 (start at 13 UTC) 6cm

- 2012 Mar 20 - Mar 21 (start at 13 UTC) 18/21cm, 6cm, 5cm or 1.3cm
- 2012 Apr 17 - Apr 18 (start at 13 UTC) 18/21cm, 6cm, 5cm or 1.3cm
- 2012 May 15 - May 16 (start at 13 UTC) 18/21cm, 6cm, 5cm or 1.3cm

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

e-VLBI proposals submitted by the February 1st deadline will be considered for scheduling in the above sessions starting from March 2012. Note that only one wavelength will be run in each session, depending on proposal priorities.

See http://www.e-merlin.ac.uk/vlbi/evn_docs/guidelines.html for details concerning the e-VLBI observation classes and the observing modes.

Features for the next regular EVN and e-EVN sessions

* The antenna in Noto is under maintenance and it is expected to be available for EVN observations from Session 2, 2012.

* Due to e-MERLIN commissioning VLBI at e-MERLIN out-stations (e.g. Cambridge) is not possible, and Jb1 is the only homestation available. After commissioning, only separate EVN (Jb home-station only) and e-MERLIN observations will initially be scheduled. For updated information please consult the web at: <http://www.e-merlin.ac.uk/vlbi/>

* Proposals requesting EVN + e-MERLIN should indicate clearly whether separate EVN and e-MERLIN observations are sufficient, or whether scheduling should await simultaneous VLBI at e-MERLIN outstations. Simultaneous wide-bandwidth VLBI and e-MERLIN operations at e-MERLIN outstations are planned for 2012.

* Please consult http://www.evlbi.org/evlbi/e-vlbi_status.html and the [EVN User Guide](#) for updates on the current EVN and e-EVN array; availability of different stations per observing band and for the dates of the e-EVN observing sessions.

Large EVN projects

Most proposals request 12-48hrs 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.

How to submit

All EVN, Global and e-VLBI proposals (except ToO proposals) 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.nl>

The SCIENTIFIC JUSTIFICATION MUST BE LIMITED TO 2 PAGES in length. Up to 2 additional pages with diagrams may be included.

The deadline for submission is 23:59:59 UTC on 1 February 2012.

Additional information

Further information on Global VLBI, EVN+MERLIN and e-EVN observations, and guidelines for proposal submission are available at: http://www.e-merlin.ac.uk/vlbi/evn_docs/guidelines.html

The [EVN User Guide](#) 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.

3) EVN Science Highlights

a) A weak compact jet in a soft state of Cygnus X-1

Cygnus X-1 is one of the most famous black holes in the Galaxy and is a persistently strong source of highly variable X-ray emission. Monitoring the radio emission traces the rapid changes in the outflowing jet from the accretion disk and our work has been to study how the different X-ray "states" affects the outflow.

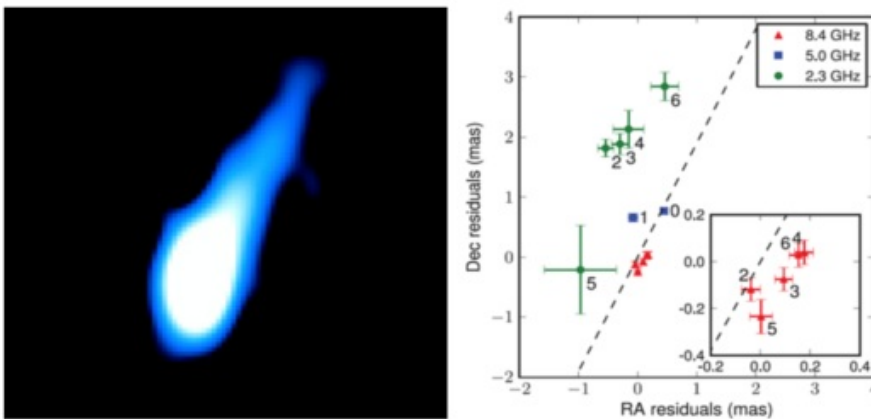


Fig. (Left) The one-sided jet of Cygnus X-1 that is always seen in the hard X-ray state as observed with the VLBA at 8.4 GHz. (Right) Astrometric VLBI positions of the unresolved core taken during the soft X-ray state. Although the jet appears quenched during the soft state, residual motion of the core clearly shows the source to move along the jet axis.

Hard X-ray states of Galactic black holes are known to produce relatively radio bright jets and VLBI observations of Cygnus X-1 can resolve an apparent one-sided outflow (see Fig. (Right)). However, soft states of these sources have shown the radio emission to become quenched despite an apparent increase in the overall X-ray luminosity; even though the accretion rate may increase, it is unknown why the jet launching mechanism becomes disabled.

Our work in June 2010 with the VLBA, EVN and MERLIN has shown the first direct evidence that a jet can remain in a soft state of a black hole, albeit at a much weaker radio luminosity. Using astrometric VLBI analysis and removing proper motion, parallax and orbital motion signatures, the residual positions show a scatter of >0.2 mas along the position angle of the known jet axis (see Fig. (Left)). High time-resolution X-ray observations with the RXTE-PCA were also taken during the radio-monitoring period to confirm the source had entered a soft state.

Authors: A. Rushton (ESO/Onsala), J. C. A. Miller-Jones, (Curtin), R. Campana (INAF), Y. Evangelista (INAF), Z. Paragi (JIVE), T. J. Maccarone (Southampton), G.G. Pooley (Cambridge), V. Tudose (ASTRON), R. P. Fender (Southampton), R. E. Spencer (JBCA) and V. Dhawan (NRAO)

Reference: [Rushton et al., 2011, MNRAS, 419, 3194](#)

4) EVN Scheduler's Report January 2012

a) SESSIONS SCHEDULED SINCE THE LAST NEWSLETTER

2011 Session 3: 20 October - 10 November

Wavelengths: 6, 5, 18, 3.6 and 1.3 cm

Number of different user projects observed: 19

SESSION DURATION: 20.7 days

Scheduling efficiency: 56.6 %

Breakdown of observations by type and correlator. T-BYTES indicates the estimated disk usage (in TB) at EVN telescopes.

	N-OBS	HOURS	DAYS	T-BYTES
TOTAL	36	281.5	11.7	548.7
EVN-only	23	217.5	9.1	437.4
GLOBAL	3	28.0	1.2	79.2
Short Obs.	0	0.0	0.0	0.0
Tests	10	36.0	1.5	32.1
User: Cont.	18	167.5	7.0	398.6
User: Line	6	66.0	2.8	60.7
User: Pulsar	2	12.0	0.5	57.3
EVN-Corr.	23	183.0	7.6	452.4
Bonn-Corr.	2	14.0	0.6	66.4
VLBA-Corr.	1	8.0	0.3	29.9
eEVN-Corr.	5	55.0	2.3	
Other-Corr	0	0.0	0	
CAL-only	5	21.5	0.9	
MERLIN	0			
Arecibo	2			
VLBA	3			
GBT	3			
VLA	0			
Robledo	0			
Goldstone	0			

b) e-VLBI SCHEDULING

SESSION	DATE	WAVELENGTH	HOURS	e-VLBI	PROPOSAL	TYPE	
				Normal / Short	Disk / ToO	Trigger	
11e08	17OCT11	6cm	10h	2 / 1	- / -	2	no triggers
11e09	23NOV11	6cm	13h	- / -	- / 1	2	1 triggered
11e10	14DEC11	18cm	14h	1 / 2	- / -	2	no triggers
12e01	10JAN12	6cm	10h	1 / 3	- / -	2	no triggers

5) JIVE questionnaire 2012

The Joint Institute for VLBI in Europe will undergo a review in early 2012. As part of this evaluation, we invited EVN users active in the past five years to participate in a survey. We kindly ask all of you to fill in the questionnaire, which will provide important inputs to the review process. Within a day of the initial invitation, 37 users already fully completed the survey. If you have been an active EVN user and have not received an invitation (for example because your e-mail address changed and we could not find your new address), please let us know

and we will send you one. The deadline for completing the survey is 1 February 2012.

Bob Campbell (campbell[at]jive.nl), Zsolt Paragi (zparagi[at]jive.nl)

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Edited by [Rob Beswick](#) (JBCA/e-MERLIN)