

VLBA PROPOSAL COVERSHEET

DEADLINES: 1st of Feb., June, Oct.

rcvd:

- (1) Date Prepared: February 20, 2008
 (2) Title of Proposal: Exploratory follow up on a serendipitous discovery of a lens candidate

(3) AUTHORS (Add * for new location)	INSTITUTION	E-mail	Students Only		
			G/U	For Thesis?	Ph.D. Year
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(4) Related previous or current VLBI proposal(s): BK124 Resubmission

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(7) Scientific Category: astrometry & geodesy galactic extragalactic other:
 Rapid Response Science: Known Transient Exploratory Target of Opportunity

(8) Wavelength(s) requested (those not available on the global network are indicated with a small circle):
 90cm 50cm 30cm 21cm 18cm 13cm 6cm 5cm 3.6cm 3.6/13cm
 2cm 1.3cm 7mm 3mm
 Global Network standard bands Special frequencies: _____

(9) Recording format: Default continuum setup (VLBA only), VLBA/MkIV, MkIII: _____
 Bandwidth per BaseBand channel: 8
 Aggregate bit rate: 256 (_____ BB channels at _____ MSamples/sec of 1 bit, 2 bit)

(10) Multi-epoch observation: _____ epochs of _____ hours each, separated by _____

(11) Network	Requested antennas	Total time requested
EVN & MERLIN		
VLBA	ALL	4.0 hours
other NRAO		
Non-VLBI Instruments		

(12) ABSTRACT (Do not write outside this space. Please type)
 Re-analysis of VLBA Calibrator Survey data resulted in a serendipitous discovery of an object with two VLBI-compact componets separated by 25 seconds of arc. Both of these features show similar flat radio spectrum. We request 3-frequency dual polarization exploratory VLBA observations to confirm a hypothesis that these can be two images of one gravitationally lensed compact extragalactic object. If confirmed, we will apply for ESO VLT spectroscopic measurements of the redshift of the two objects by the end of March 2008.

Scheduler use only
 (8/03)

- (13) Observation type: Interferometry, Spectroscopy, Pulsar, Phase referencing
- (14) Proposal is Suitable for dynamic scheduling.
- (15) Polarization: Single Polarization Dual Circular Polarization
Global network standard for single polarization is LCP for all λ s except 13cm (RCP) and 3.6cm (RCP).
- (16) Tape usage (Show <recording time>/<total time>): _____
- (17) Assistance required:
Observation Setup: Consultation, Extensive help, Observe file preparation
Postprocessing: Consultation, Extensive help, Calibration service
- (18) Processor: Socorro, JIVE, Haystack, Bonn, Washington, Other _____
Special processing: XPol, Pulsar gate, Multiple Fields: _____
Averaging time: _____ Spectral channels per baseband channel: _____
 Other special processing: _____
- (19) Postprocessing Location: MPIfR-Bonn
- (20) Source list: J2000 B1950
If more than 4 sources, please attach list. If more than 30, give only selection criteria and GST range(s)

	Source 1	Source 2	Source 3	Source 4
Name(s)	J0635-262A	J0635-262B		
RA (hh mm)	06:35:20.9092	06:35:19.4162		
Dec (dd.d)	-26:20:39.879	-26:20:55.719		
GST range (Europe)				
GST range (US)	12:00 – 16:00	12:00 – 16:00		
GST range (Other)				
Band(s)	L/C/U	L/C/U		
Flux density (Total, Jy)	0.1–0.2 Jy	0.1–0.2 Jy		
Flux density (correlated, mJy)	100–200 mJy	100–200 mJy		
RMS needed (mJy/beam)	0.1–0.2 mJy/beam	0.1–0.2 mJy/beam		
Peak/RMS needed	1000:1	1000:1		

- (21) Preferred VLBI session or range of dates for scheduling, and why:
As soon as possible so that we could proceed with optical proposal to measure redshifts of components A & B.
- (22) Dates which are NOT acceptable, and why:
- (23) Attach a self-contained scientific justification, not in excess of 1000 words.
Preprints or reprints will not be forwarded to the referees.

Information about the capabilities of the VLBA may be found on the World Wide Web by starting at the NRAO home page, <http://www.nrao.edu>, and selecting the VLBA from “Sites and Telescopes.”

A brief summary of the capabilities of the EVN antennas is given in the EVN STATUS TABLE in the EVN USER GUIDE, which may be found at http://www.evlbi.org/user_guide/user_guide.html.

Please include the full postal addresses for first-time users or for those that have moved (if not contact author).