

Observing Application

Date: 2006-04-10 Proposal ID: VLA/06A-004
Type: Rapid response science (Target of Opportunity)
Category: Extragalactic Total time: 3 hours

Time delay in variability pattern between two telescopes the VLA and the ATCA

Abstract:

Measurement of the time delay in variability pattern in scintillating sources, between two widely separated telescopes is a technique, which can lead to the independent derivation of the scattering screen velocity. This important parameter of the Interstellar Medium of our Galaxy is essential for the successful imaging of micro-arcsecond structure of the very inner parts of jets in scintillating quasars. We propose to carry out such an experiment for one of the most extreme scintillators, the quasar PKS 0405-385, which re-entered the phase of the fast and strong scintillations at the GHz frequencies.

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Related proposals:

Observing type(s):

Continuum, Monitoring, Polarimetry, Other: Split array

Resources:

Resource name	Tele. Conf. Ant.	Frontend & Backend	Set up
X-band	VLA (Any) All	X Band 3.6 cm 7.55 - 9.05 GHz VLA Correlator - Single Channel Continuum	Sky frequency: GHz
C-band	VLA (Any) All	C Band 6 cm 4.25 - 5.10 GHz VLA Correlator - Single Channel Continuum	Sky frequency: GHz

Sources:

Source name	RA	DEC	System	RA range	DEC range	Velocity/z	Group name
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PKS 0405-385	04:06:59	-38:26:28	J2000	00:00:00	00:00:00	0.0 Km/s	
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Sessions:

Session name	LST Center	Resources	Sources or Groups	Time request
time delay	00:00	C-band(VLA/Any), X-band(VLA/Any)	PKS 0405-385	3.0 hours x 1 4 weeks

Schedule Constraints:

time delay
coordinated with the ATCA

Present for observation: no Staff support: Consultation