Observing Application

Date:Sep 17, 2006
Proposal ID:VLA/07C-102
Legacy ID:AP513
PI: Ylva Pihlstrom
Type:Rapid Response
Exploratory Time
Category: Stellar, Galactic
Total time: 1.0 hour

Accurate Maser Positions and Velocities for VLBA Astrometry

Abstract:

We propose ad hoc VLA observations to confirm the brightness and positions of masers to be used in our multi-epoch VLBA astrometry project of the HH7-11 region in Perseus. The first epoch of the VLBA project indicates that the masers have either faded, or are resolved out at VLBA baselines. In either case, to optimize the scientific outcome, the VLBA observations need to be adjusted to new maser velocities, or to new positions where other bright masers in this region are located. The new VLA data will search the region for other, currently active masers and return accurate positions and velocities to be used in the following VLBA epochs.

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Related proposals:
BL143

Joint:
Not a Joint Proposal

Observing type(s):
Spectroscopy, *

Resources:

Resource name	Tele. Conf.	Frontend & Backend	Set up
HH7-11MASER	VLA B	K Band 1.3 cm 21200 - 25200 MHz VLA Correlator - Spectral Line	IF mode: 2 Bandwidth: 6.25 MHz Number of channels: 64 Spectral resolution: 97.656 kHz Rest frequencies: 22235.08 MHz

Sources:

Source name	RA / RA Range	DEC / DEC Range	System	Velocity/z	Group name
VLA4AB	03:29:04.1 00:00:00.0	+31:16:05 00:00:00	J2000	0 km/s	HH7-11
VLA2A	03:29:01.9 00:00:00.0	+31:15:37 00:00:00	J2000	0 km/s	HH7-11

Sessions:

Session Name	Session Time	Repeat	Separation	LST Minimum	LST Maximum	Elevation Minimum
Session1	1.0 hour	1	0 day	21:00:00	10:00:00	0

Session Constraints:

Session Name	Constraint	Comments
Session1		These observations may be cut into two half-hour long slots.

Session Source/Resource Pairs:

Session Name	Source	Resource	Time	Figure of Merit
Session1	VLA4AB/HH7-11	HH7-11MASER	0.5 hour	3.5mJy/bm
Session1	VLA2A/HH7-11	HH7-11MASER	0.5 hour	3.5mJy/bm

Total Time per Configuration:

Configuration	Total Time
B	1.0

Present for observation: no Staff support: None