

Technical Page

This proposal has not been submitted before.

Proposal Type: Regular
 General Category: VLBI
 Sub-Category: Continuum
 Observation Category: Extragalactic
 Total Time Requested: 50 Hours
 Minimum Useful Time: 1 hour

Proposal Title: RadioAstron-Arecibo Space VLBI Survey of AGN at the Highest Angular Resolutions

ABSTRACT:

We request 100 hours of Arecibo time for July 2014 - June 2015 inclusive to perform a non-imaging Space VLBI survey of the bright AGN jet cores with RadioAstron at L and C bands. Early outcome of the survey demonstrates promising results and a high detection rate at long Space VLBI baselines. The main goal of this project is to study physics of AGN cores and properties of ISM by observing AGNs up to the longest RadioAstron baseline projections and measuring the core's geometry and brightness temperature while taking the influence of the inter-stellar medium into full consideration. These observations will enable the highest resolution ever achieved in direct astronomical observations at the proposed bands.

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Remote Observing Request

- Observer will travel to AO
- Remote Observing
- In Absentia (instructions to operator)

Instrument Setup

L-wide C

Atmospheric Observation Instruments:

Special Equipment or setup: MK5 VLBI disk recording

RFI Considerations

Frequency Ranges Planned