

Instituto Argentino de Radioastronomía IAR
Research Proposal-Request for Observation Time
period 2020 / 2021

For questions or form delivery: observatorio@iar-conicet.gov.ar

1. 1. INFORMATION FOR APPLICATION

PI Name: _____	Proposal n°: _____
PI Institution: _____	
PI E-mail: _____	Semester: __ Year: 20__
PI Phone number: _____	IP Fax: _____

OBSERVING MODE:

~~In-Situ:~~ Not available

~~Remote:~~ Not available

Service: X

TITLE (S) OF THE PROJECT OR PROJECTS (One line per project)

A.
B.
C.
D.
E.

ABSTRACT (S) (A single abstract or a summary per program of 1500 characters)

COLLABORATORS

Name	Institution	E-mail	Project(s) (A,B,C,D,E)

SCIENTIFIC JUSTIFICATION (maximum 7500 characters). It presents the background of the topic, and objectives of the proposal, explaining its relevance to the specific topic, and eventually placing itself within a broader astronomical context.

Observational strategy: (maximum 2500 characters). It must describe in a comprehensive manner, the methodology of the observation program, justifying the selection of the sample and the requested time, based on astrophysical considerations. Here it is explained how the proposed observations and their subsequent analysis (including, for example, statistical treatment of data, comparison with models, etc.)

LIST OF REQUESTED OBJECTS

Item	Project (A,B,C,D,E)	Object	RA(h,m,s)	Dec (grad,min,sec)	Flux (frequency)
1					
2					
3					
4					
5					
6					
7					
8					
9					

TIME AND MODE OF RADIOTElescope REQUESTED

Item	Radio Telescope Dr.C.Varsavsky Dr.E.Bajaja	Mode: Tracking Sweep @Span (i)	Instrument: Line Total Power Transient (ii)	Total Obs Time in seconds Max:12600	Band- width MHz (iii)	Central Frequency MHz (iv)	Days repeat	Noise cal OFF ON Pulsed (v)
1								
2								
3								
4								
5								
6								
7								
8								
9								

i) The direction of the sweep North-South, East-West, or both, as well as the width of the sweep in degrees must be indicated. Due to the type of operation of the sweep and data collection, a data set corresponding to a sweep will take approx. 5 minutes for each direction.

ii) The minimum integration time will be:

- Line y Total power: 20 milliseconds.
- Transient: 73 microseconds.

iii) The maximum available bandwidth will be:

- Dr. C. Varsavsky: 112 MHz, single circular polarization, with a maximum of 128 spectral channels, divided into the selected bandwidth.
- Dr. E. Bajaja: 56 MHz, total power sum of two circular polarizations, with a maximum of 64 spectral channels, divided into the selected bandwidth.

iv) The center frequency should be specified when the maximum bandwidths are not used for:

Dr. C. Varsavsky: in the limit range of 1365 MHz to 1476 MHz.

Dr. E. Bajaja: in the limit range of 1150 MHz to 1450 MHz .

v) The noise cal or noise source pulsed mode consists of the noise injected turned on for one second with a three second period. In the case of requiring a source with ON and OFF mode, must be indicated the repeated source indicating ON and OFF.

The data will be saved in FILTERBANK format, after verification of its duration and quality, this must be > 80% of the actual observed time requested and > 85% free of electromagnetic interference. and without any type of process. The data will be available for download within 24 hours after the observation (<http://sigproc.sourceforge.net/sigproc.pdf>).

For technical questions: observatorio@iar-conicet.gov.ar

TECHNICAL JUSTIFICATION

Discuss the feasibility of the observations and justify the amount of time requested.

Project:	Object:	Instrument:

COSTS ASSOCIATED WITH THE REQUEST FOR OBSERVATION

Observation session in SERVICE mode (only available period 2020/2021):

Cost per useful session defined as a 24-hour period, with > 80% effective observed time requested and > 85% free of electromagnetic interference.

PI from Argentine institution		\$1500 arg.
PI of foreign institution	\$	\$200usd.

In case of requiring an observation campaign of more than 5 days, the cost of the 24-hour period will be:

PI from Argentine institution		\$1000 arg.
PI of foreign institution		\$150 usd.

For questions regarding the payment or billing: observatorio@iar-conicet.gov.ar