

AAS Splinter Session

Proposing for NRAO Instruments

American Astronomical Society 223rd
meeting

Tuesday 7 January 2014

12:30 - 3:30 p.m. EST

Potomac 1, Gaylord Convention Center



Contents

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2. [Program](#)
3. [Hands-on session
GBT](#)
4. [Hands-on session
VLA](#)
5. [Hands-on session
VLBA](#)



GBT



VLA



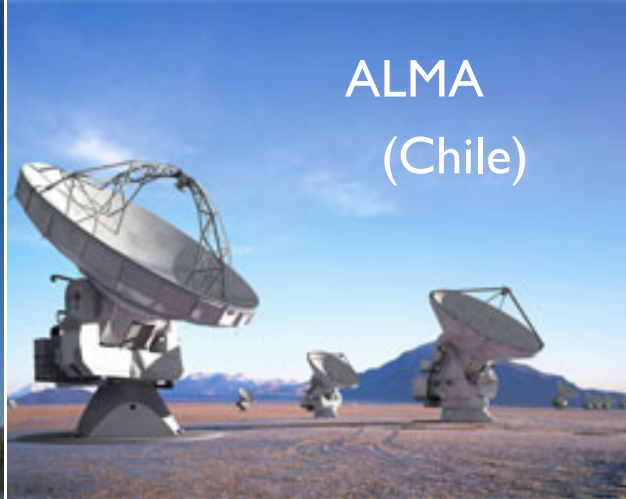
VLBA

1230 - 1240	Proposing for NRAO Instruments	David Frayer
1240 - 1255	Proposing for the Green Bank Telescope (GBT)	David Frayer
1255 - 1310	Proposing for the Very Large Array (VLA)	Gustaaf van Moorsel
1310 - 1325	Proposing for the Very Long Baseline Array (VLBA)	Jim Braatz
1330 - end	Hands-on use of the Proposal Submission Tool (PST)	All
	Snacks will be provided	

NRAO telescopes and facilities: <https://science.nrao.edu> or go to nrao.edu and click on "For Astronomers"



Green Bank Observatory
(West Virginia)



ALMA
(Chile)



New Technology Center
(Charlottesville, Virginia)



Very Large Array
(Socorro, New Mexico)



Very Long Baseline Array



Proposing for NRAO Instruments

- Next GBT, VLA, VLBA/HSA/VLBI proposal deadline is **Feb. 03, 2014 at 5pm EST (2200 UT)** which is for semester “14B” (Aug 2014 – Jan 2015 observations)
- Users must propose using the Proposal Submission Tool (PST) and register with mynrao.edu
- Scientific Justification (pdf file) limited to 4 pages (11pt font), including all figures, tables, and references
- Technical Justification details are filled into text boxes within the PST
- Large proposals (>200hr) [10 page limit] and must include a data management plan
- Students planning to use NRAO facilities for their PhD should submit a “Plan of Dissertation Research” (<1000 words)
- Opportunities for Joint Observations of NRAO facilities with HST, Chandra, or Fermi



NRAO Semester 2014B Proposal Call

 **National Radio Astronomy Observatory**
Enabling forefront research into the Universe at radio wavelengths

Staff Login | Login to My.NRAO.edu | Contact Us | View Public Site

Search NRAO...

Home About NRAO Science Research Facilities Observing Opportunities

Telescope
specific
details

- NRAO eNews
- Volume 7, Issue 1
- January 3, 2014
- NRAO Call for Proposals: Semester 2014B
- News for Proposers
- General Information
- VLA Proposals**
- GBT Proposals
- VLBA, HSA & VLBI Proposals

▾

PST



NRAO Call for Proposals: Semester 2014B

NRAO eNews • Volume 7, Issue 1 • January 3, 2013



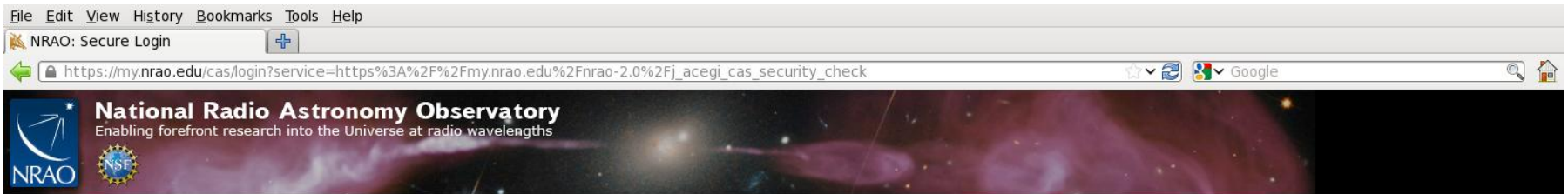
NRAO Call for Proposals: Semester 2014B

The NRAO announces the Call for Proposals for the 3 February deadline for Semester 2014B. The call is open now and will close on Monday, 3 February 2014, at 17:00 EST (22:00 UTC).

Proposal preparation and submission are via the NRAO Proposal Submission Tool (PST) available through the [NRAO Interactive Services](#). Important modifications to the PST have been made and will be in place starting 12:00 EST (17:00 UTC) Friday, 3 January 2014. Proposals of type [Regular, Large, or Triggered](#) may be submitted. All proposal authors must be registered users. On the registration form you will be asked for contact information that will be used for notification about proposal disposition, observation preparation, etc.

News for Proposers

“MyNRAO” Account needed for using the Proposal Submission Tool (PST)



Login

Username:
dfrayer

Password:
•••••

Register for an Account

Accounts are used by astronomers to create and submit proposals, prepare for observations, and gain access to proprietary data from the archive.

[Lost your Username or Password?](#) You can reset it [online](#).

If you need help, please [email us](#).

<https://my.nrao.edu>

MyNRAO-PST Front-page “Dashboard”

The screenshot shows a web browser window with the URL <https://my.nrao.edu/nrao-2.0/secure/Home.htm>. The page header includes the NRAO logo and the text "National Radio Astronomy Observatory". A navigation bar contains several tabs: "Dashboard", "Proposals", "Reviews", "Data Process", "Obs Prep", "Helpdesk", and "Profile". The "Proposals" and "Helpdesk" tabs are circled in red. On the right side of the header, it says "Hi, David | [Sign Out](#)" and "Friday 24 May 2013". A "Help" button is located in the top right corner.

The main content area is titled "DASHBOARD". On the left, there is a sidebar with the heading "Options" and a tree view containing:

- Dashboard
 - News & General Information
 - Information for Astronomers
 - Documentation
 - Release Notes
 - Policies
 - My Information
 - My Data

The main content area features a section titled "Telescope News" with the following text:

Next Proposal Deadline In 69 Days - **August 01, 2013 5 PM EDT (21 hours UT)**

Important All proposal authors must be registered users

Important [Information for VLA/GBT/VLBA/HSA/VLBI Proposers](#) - January 3, 2013

[VLA Configuration Plans and Proposal Deadlines](#) - January 3, 2013

In the bottom right corner, there is a link for "Proposal Help Desk" with a star icon.

The footer contains logos for NRAO, NSF, and Associated Universities, Inc., followed by the text: "The National Radio Astronomy Observatory is a facility of the National Science Foundation operated under cooperative agreement by Associated Universities, Inc."

Use NRAO Helpdesk for any Questions (<https://help.nrao.edu>: VLA/GBT/VLBA Proposal Submission “Department”)

The screenshot shows a web browser window with the URL <https://help.nrao.edu>. The page header includes the NRAO logo and the text "National Radio Astronomy Observatory" and "A facility of the National Science Foundation". The navigation bar contains "Home" and "Knowledgebase" links, along with a language dropdown set to "English (U.S.)". On the left, there is a "Login" section with a "Login" button. Below it, a "Knowledgebase" section lists categories: Downloads, VLA (13), ALMA (3), CASA (11), and GBT (5). On the right, there is a search bar with the placeholder text "Please type your question here" and a "SEARCH" button. Below the search bar is a "Knowledgebase" link with a folder icon.

Create New Proposal

File Edit View History Bookmarks Tools Help

NRAO: Proposals

https://webtest.aoc.nrao.edu/nrao-2.0/secure/ProposalList.htm

Google



National Radio Astronomy Observatory

Dashboard

Proposals

Reviews

Data Processing

Obs Prep

Helpdesk

Profile

Hi, David | Sign Out

My Proposals

Available Authors

Available Organizations

Monday 28 September 2013

Create Help



VLA



GBT



VLBAHSA



GMVA



Proposal Help Desk



Filling in Proposal Sections

NRAO: Cover Sheet - Mozilla Firefox

File Edit View History Bookmarks Tools Help

NRAO: Cover Sheet

https://my.nrao.edu/nrao-2.0/secure/CoverSheetPage.htm

NRAO National Radio Astronomy Observatory

Dashboard Proposals Reviews Data Proc Obs Prep Helpdesk Profile

Hi. David | Sign Out

My Proposals Available Authors Available Organizations

Validate Print Submit

Friday, May 2013

Edit Help

GENERAL

Options

- My Proposals
 - GBT/2013-04-007
 - General**
 - Authors
 - Science Justification
 - Sources
 - Resources
 - Sessions
 - Print Preview
 - GBT/13B-355
 - GBT/13B-179
 - GBT/13B-050
 - GBT/13A-500
 - GBT/13A-474
 - GBT/13A-253
 - GBT/13A-137
 - GBT/13A-124
 - GBT/13A-108
 - GBT/13A-104
 - GBT/13A-042
 - GBT/13A-021



Observing Proposal

Status: DRAFT
Create Date: 05/24/2013
Modify Date: 05/24/2013
Submit Date:
Total Time: 0.0

Title

This is a blank proposal created on Friday May 24, 2013

Type

Regular

Scientific Category

Abstract

Joint

Not a Joint Proposal

Observing Type(s)

Dissertation Research Plan

Dissertation Research Plan(s) not required

Observer Present for Observations



General Information

- Dashboard
- Proposals
- Reviews
- Data Process
- Obs Prep
- Helpdesk
- Profile

Hi, David | Sign Out

- My Proposals
- Available Authors
- Available Organizations

Friday 24 May 2013

- Validate
- Print
- Submit

Cancel Save Help

- Options
- My Proposals
 - GBT/2013-04-007
 - General
 - Authors
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 - GBT/13A-137
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 - GBT/13A-108
 - GBT/13A-104
 - GBT/13A-042
 - GBT/13A-021

GENERAL (changes will auto-save in 9 minutes)

General



Observing Proposal

Status: DRAFT
Create Date: 05/24/2013
Modify Date: 05/24/2013
Submit Date:
Total Time: 0.0

Title (80 characters max)

Proposal Type
 Regular Large Triggered Director's Discretionary Time

Scientific Category (Click [here](#) for additional information about Proposal Science Categories)

- Active Galactic Nuclei (Active galactic nuclei: Seyferts; low-luminosity AGN; H2O megamasers; radio galaxies; blazars; quasars/QSOs; environmental interactions)
- Energetic Transients and Pulsars (X-ray binaries, cataclysmic variables, supernovae, gamma-ray bursts, pulsars)
- Extragalactic Structure (Galaxies (line): galaxy structure; galaxy kinematics and dynamics; galaxy chemistry; gas in galaxies)
- High Redshift and Source Surveys (High-Z objects; extragalactic source surveys; galaxy formation; gravitational lenses; CMB; early universe)
- Interstellar Medium (galactic HI & OH; ISM magnetic field; SNRs; HII regions; astrochemistry)
- Normal Galaxies, Groups, and Clusters (Galaxies (continuum), groups, clusters: disk emission; star formation; magnetic fields; galactic winds; starbursts; intracluster emission)
- Solar System, Stars, Planetary Systems (Sun, planets, comets, IPM; exoplanets; main sequence stars; active stars; stellar winds; AGB & post-AGB stars; PNe; novae)
- Star Formation (young stellar objects; protostars; jets, outflows; T Tauri stars; circumstellar disks; protoplanetary systems; astrochemistry)

Abstract (200 words max, 10 min) **[Word Count : 30]**

Joint
 Not a Joint Proposal Joint with VLA Joint with VLBA Joint with VLA and VLBA

Observing Type(s)
 Continuum Spectroscopy Polarimetry

Adding in Authors

AUTHORS

Principal Investigator:

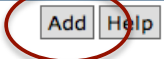
Contact:

Order	Name	Email	Affiliation	Dissertation Plan	Add
up / down	David Frayer	dfrayer@nrao.edu	National Radio Astronomy Observatory	N/A	<input type="button" value="Add"/>
up / down	John Doe	jdoe@nrao.edu	Please contact me to add my Institution	N/A	

Options

- My Proposals
 - VLA/13B-385
 - VLA/13A-382
 - VLA/12B-217
 - VLA/12B-124
 - VLA/12A-201
 - VLA/11B-044
 - VLA/11A-182
 - VLA/10C-231
 - VLA/10C-218
 - VLA/10C-205
 - VLA/10B-203
 - VLA/10A-211
 - VLA/10A-146
 - VLA/09A-122
 - VLA/07B-236
 - VLA/07A-224
 - GBT/2013-03-003
 - General
 - Authors**
 - Science Justification
 - Technical Justification
 - Sources
 - Resources
 - Sessions

Add in Science Justification (4pages)



SCIENCE JUSTIFICATION

« < Science Justification > »

Justification File *.pdf, .txt only; font size no less than 11pt; no more than 4 pages (including figures, tables, and references).*

File Preview *Note: Only a preview. Please click on 'Download' to view the uploaded File.*

Options

- My Proposals
 - VLA/13B-385
 - VLA/13A-382
 - VLA/12B-217
 - VLA/12B-124
 - VLA/12A-201
 - VLA/11B-044
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 - VLA/09A-122
 - VLA/07B-236
 - VLA/07A-224
 - GBT/2013-03-003
- General
- Authors
- Science Justification**

Fill in Technical Justification Details

TECHNICAL JUSTIFICATION

GBT Technical Justification

Use this page to specify how the technical set-up requested under 'Resources' enables the scientific goals to be met.

For each resource briefly justify the observing mode and all values used in determining the required observing time (e.g. frequency switching or position switching, bandwidth, spectral resolution, polarization, etc.). Include all inputs and results for the GBT sensitivity calculator. If the sensitivity calculator is not used then provide all equations, with each term defined, along with the values used. If a specific documented instrument sensitivity is used then provide the reference for the value used.

For any session that uses mapping present all inputs and results from GBT mapping planner. If the mapping planner is not used then provide all equations, with each term defined, along with the values used. The sensitivity calculator observing time results are for a sensitivity per beam. To calculate time per pixel simply divide the time per beam by the number of pixels per beam.

For each session, briefly discuss the potential impact of RFI and how it would be handled during the observations and during data reduction:

For each session, discuss the amount of overhead time needed and how that value was derived (e.g. receiver change time, slew time, time for pointing and focusing, time for AutoOOF, calibration observations, etc.):

If your proposal contains novel observing or data reduction techniques please provide details on the techniques to be used:

Pulsar proposals should list the information such as the spin period, dispersions measure, binary period, average flux, etc. for any known pulsar:

Nod observations.
W-band, HCN, HCO+
2x800MHz windows
50km/s resolution, 1mJy/beam

Technical

details are

telescope

dependent

N/A

N/A

Enter Source Information

NRAO: Proposals - Mozilla Firefox
 Edit View History Bookmarks Tools Help
 NRAO: Proposals
 https://my.nrao.edu/nrao-2.0/secure/ProposalSources.htm

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Dashboard Proposals Reviews Data Process Obs Prep Helpdesk Profile

Hi. David | Sign Out

My Proposals Available Authors Available Organizations

Friday 24 May 2013

Validate Print Submit

Convert Export Import Copy Sources New Source Group Help

SOURCES Sources

Proposers must specify their source lists (or potential targets) in full with the exception of Triggered proposals where the targets are unknown a priori.

Galaxy-X No Sessions up / down Search NED/SIMBAD

Order	Name	Position		Velocity			
	My_Galaxy	Co-ordinate System		Equatorial	Convention	Radio	
		Equinox		J2000			
		Right Ascension	Value:	00:00:00	Ref. Frame	LSRK	Save Delete Cancel
			Range(±):	00:00:00			
		Declination	Value:	00:00:00	Velocity	0.00	
			Range(±):	00:00:00			
	Calibrator				<input type="checkbox"/>		

- Options
- My Proposals
 - GBT/2013-04-007
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 - GBT/13A-253
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 - GBT/13A-124
 - GBT/13A-108
 - GBT/13A-104
 - GBT/13A-042
 - GBT/13A-021

Proposal Help Desk



Enter "Resources" (Receiver and Backend configuration)

GBT RESOURCES

Mygalaxy-wband

No Sessions

up / down

Order	Name	Receiver	Back End
	Wband	W-band MM4 (85-93)	VEGAS

Observing Type: Spectral Line

Number of Beams: 2

Number of Vegas Spectrometers: 4

	Spectrometer 1	Spectrometer 2	Spectrometer 3	Spectrometer 4
Mode:	2	2	2	2
Bandwidth (MHz)	1250.000	1250.000	1250.000	1250.000
Rest Frequencies (GHz):	88.63	88.63	89.19	89.19
Spectral Resolution (KHz):	92	92	92	92
Integration Time (s):	2.0000	2.0000	2.0000	2.0000
Data Rate per Spectrometer (MB/s):	0.125	0.125	0.125	0.125
	Spectrometer 5	Spectrometer 6	Spectrometer 7	Spectrometer 8
Mode:				
Bandwidth (MHz)				
Rest Frequencies (GHz):				
Spectral Resolution (KHz):				
Integration Time (s):				
Data Rate per Spectrometer (MB/s):				

Save
Delete
Cancel



Options

- My Proposals
 - GBT/2013-04-007
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Enter Observing "Sessions" (defined by source LST ranges and resources/receiver)

https://my.nrao.edu/nrao-2.0/secure/SessionsPage.htm



National Radio Astronomy Observatory

Dashboard Proposals Reviews Data Process Obs Prep Helpdesk Profile

Hi, David | Sign Out

My Proposals Available Authors Available Organizations

Friday 24 May 2013

New Session Help

Validate Print Submit

SESSIONS

« < Sessions > »

Options

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 - GBT/13A-108
 - GBT/13A-104
 - GBT/13A-042
 - GBT/13A-021

Session	Number of Sessions	Separation	Min. Start LST	Max. End LST	Min. Elevation
<input type="text" value="mysession"/>	<input type="text" value="1"/>	<input type="text" value="0"/> day(s)	<input type="text" value="16:00:00"/> (HH:MM:SS)	<input type="text" value="04:00:00"/> (HH:MM:SS)	<input type="text" value="30"/>

[GBT Sensitivity Calculator](#)
[Mapping Planner](#)
[Spectral Advisor](#)

Constraints:
 Comments:

Save Cancel

Source Groups	Resources Groups	Time/Session (hrs)
<input type="text" value="Galaxy-X"/>	<input type="text" value="Mysetup"/>	<input type="text" value="1.0"/>

Note: Adding Source/Resource Groups to a session will automatically associate all sources/resources, within the group, to the session.

Proposal Help Desk



Review Proposal, "Validate", and Submit

If you need to update the proposal after hitting submit, withdraw proposal and copy information into a new proposal and resubmit (unlike ALMA, Spitzer,...)



NRAO: Print Preview - Mozilla Firefox
Edit View History Bookmarks Tools Help
NRAO: Print Preview Sensitivity Calculator
https://my.nrao.edu/nrao-2.0/secure/PrintPreviewPage.htm

NRAO National Radio Astronomy Observatory

Dashboard Proposals Reviews Data Process Obs Prep Helpdesk Profile

Hi, David | Sign Out

My Proposals Available Authors Available Organizations

Validate Print **Submit** Download Justification Print All Help

PRINT PREVIEW (without Science Justification)

Options

- My Proposals
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 - GBT/13A-042
 - GBT/13A-021

Observing Application

Date : Proposal GBT/2013-04-007
ID :
Legacy ID :
PI : David Frayer
Type : Regular
Category Normal Galaxies,
: Groups, and
Clusters
Total 1.0
Time :

The GBT is best radio telescope on planet Earth

Abstract:
We proposed GBT W-band observations of HCN and HCO+ to combine GBT short-space data with our ALMA images to study the dense gas properties in our favorite galaxy.

Authors:

Name	Institution	Email	Status
David Frayer	National Radio Astronomy Observatory	dfrayer@nrao.edu	

Principal Investigator: David Frayer
Contact: David Frayer
Telephone: 304-456-2223
Email: dfrayer@nrao.edu

Related proposals:

Joint:
Not a Joint Proposal

Proposing for NRAO Instruments Summary:

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