

The survey vehicles of choice....

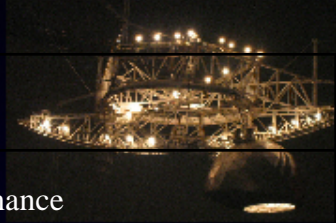


**ALFA**

Arecibo Leg



**ALFA**



**THURSDAY, JUNE 24:**

Space Sci 301

09:00 am

Riccardo Giovanelli

Welcome to ALFALFA. Who we are, Project Governance

09:10 am

Bob Brown

ALFALFA and NAIC

09:25 am

Riccardo Giovanelli

ALFALFA: Science Goals, Sensitivities, Precursor Science

09:45 am

Riccardo Giovanelli

ALFA and ALFA Backends. Lessons Learned

10:05 am

Martha Haynes

Observing Modes, Calibration, Observing Guidelines

10:25 am

Sabrina Stierwalt

Observing Practicalities: at AO and remotely

10:40 am

Martha Haynes

Tiling the Sky: Current Status, Bookkeeping, Projections, Request for 2006

11:00 am

Coffee Break

11:20 am

Jon Davies

AGES: Lessons Learned

11:40 am

Lyle Hoffman

NGC 2903: Lessons Learned

12:00 noon

Becky Koopmann

Education and Outreach. The July '05 Union Workshop

Lunch break at the Big Red Barn



Martha Haynes

**ALFALFA**

Report on the Milan Meeting of May 30

12:15 pm		Lunch break at the Big Red Barn	
01:30 pm	Martha Haynes	Report on the Milan Meeting of May 30	
01:45 pm	Riccardo Giovanelli	Data Processing Overview, Data Products	
02:10 pm	Brian Kent	Public Access and other Processing Tools, NVO Node	
02:30 pm	Vassilis Charmandaris	ALFALFA and Spitzer	
02:40 pm	Susan Neff	ALFALFA and GALEX	
02:50 pm	Discussion	ALFALFA Science and Needed Areas of Expertise	
03:30 pm	Coffee Break		
03:45 pm	Discussion	<p>Coordination of Projects within ALFALFA:</p> <ul style="list-style-type: none"> <li>- Guidelines</li> <li>- Thesis Projects</li> <li>- Project Posting</li> <li>- Authorship Guidelines</li> </ul>	
04:20 pm	Discussion	Circumstances for access to Follow-up Instruments	
04:30 pm	Discussion	Funding Issues	



03:30 pm

Coffee Break



03:45 pm

Discussion

Coordination of Projects within ALFALFA:  
- Guidelines  
- Thesis Projects  
- Project Posting  
- Authorship Guidelines

04:30 pm

Discussion

Circumstances for access to Follow-up Instruments

05:00 pm

Discussion

Funding Issues

05:30 pm

Stroll at the Plantations (weather permitting)

07:00 pm

Dinner Party at Giovanelli/Haynes' residence



start in the "Camuy Cave", Space Box 525

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<b>FRIDAY, JUNE 24:</b>		start in the "Camuy Cave", Space Sci 525
08:30 am	Leads: Riccardo, Martha, Brian, Sabrina	Data Processing Breakout Groups Move to Space Sciences Bldg. Rm 301
10:30 am		Follow-up Projects Definition and Coordination
12:00 pm		Lunch at the Big Red Barn
01:30 pm		Closing Session: Coordination Guidelines Approval, Action Items
03:00 pm		Off to Picnic by Lake Cayuga (weather permitting)



Session on "Clouds in Virgo" at 10:00-10:30?





# ALFALFA

- An extragalactic HI line survey covering 7000 sq deg
- with the ALFA multibeam feed at Arecibo
- 1335-1435 MHz (-2000 to + 17500 km/s) with 5 km/s res
- 2-pass, drift mode (eff. integration time per beam ~ 48 sec)
- 1.6/2.3 mJy rms per beam/pixel @ R=30,000
- 4000 hrs of telescope time, 5-6 years
- started Feb 2005



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## E-ALFA Surveys (as of May 2005):

- AGES<sup>2</sup> (P.I. Jon Davies, U. of Cardiff, UK)
- ALFALFA<sup>1</sup> (P.I. R. Giovanelli, Cornell U., Ithaca)
- AUDS<sup>4</sup> (P.I. Wolfram Freudling, ESO, Munich)
- NGC 2903 (P.I. Judith Irwin, Queens U., Ontario)
- ZOA<sup>3</sup> (P.I. Trish Henning, UNM, Albuquerque)



## E-ALFA Coordinating Committee:

Jon Davies  
Wolfram Freudling  
Riccardo Giovanelli  
Trish Henning  
Judith Irwin

<sup>1</sup> Survey proposal submitted Oct04; currently on 'scope

<sup>2</sup> Survey proposal submitted Feb05; under review

<sup>3</sup> To run piggy-back on G-ALFA/P-ALFA surveys

<sup>4</sup> Awaiting completion of 200 MHz backend



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# Alfalfa people:



**Cornell:** Riccardo Giovanelli, Martha Haynes, Brian Kent, Amelie Saintonge, Sabrina Stierwalt, Kristine Spekkens, Karen Masters, Chris Springob  
**Arecibo:** Phil Perillat, Barbara Catinella, Mikael Lerner, Emmanuel Momjian  
**Union:** Rebecca Koopmann  
**Minnesota:** Evan Skillman  
**Wesleyan:** John Salzer  
**Cordoba:** Diego Garcia Lambas, Carlos Valotto  
**Tel Aviv:** Noah Brosch  
**Russian AS:** Igor Karachentsev  
**Kiev:** Valentina Karachentseva  
**Milan/Brera:** Angela Iovino  
**Milan/INAF:** Marco Scodreggio  
**Arcetri:** Carlo Giovanardi, Leslie Hunt  
**Cardiff:** Jon Davies, Robert Minchin  
**Meudon:** Wim van Driel  
**ATNF:** Erik Muller  
**Lafayette:** Lyle Hoffman  
**Indiana:** Liese van Zee, Prasanth Nair  
**NRAO:** Eduardo Hardy  
**Barcelona:** Josep Solanes  
**Crete:** Vassilis Charmandaris  
**CfA:** Jessica Rosenberg  
**Milan/u.Bic.:** Peppo Gavazzi, Olga Cucciati  
**Marseille/Univ.:** Chris Marinoni  
**Michigan:** Mary Putman  
**Carnegie:** Jeremy Darling  
**Marseille/CNRS:** Alessandro Boselli  
**Washington:** Fabio Governato  
**NASA/GSFC:** Susan Neff

That's 41 persons from 11 countries and 27 different institutions.



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## From the original ALFALFA proposal, submitted 2004 Oct 1:

- 1. The P.I., who will act as an interface with NAIC and the other E-ALFA projects.
- 2. An *Oversight Committee*, formed by the P.I. and 5 other members, including a doctoral student, at least one representative of foreign institutions and at least 3 representatives of U.S. institutions. The OC will deal with issues related to science task assignments to team subgroups, coordination with other survey teams, commensality, membership, funding and conflict resolution. It will also oversee the activities of several ALFALFA subgroups, namely:
- 3. An *Observing, Data Validation and Bookkeeping* task group, responsible for coordinating the observing effort within the team and the telescope scheduling with NAIC, in charge of Level 1 data validation, rfi monitoring and alleviation issues and responsible for the overall bookkeeping effort of the survey.
- 4. A *Data Processing* task group, in charge of coordinating the processing of the data, from telescope output to calibration, bandpass subtraction, baselining, regridding, and related software development. This group will also deal with the implementation of software for the production of higher level data products, automatic signal extraction algorithms, cleaning, specialized gridding techniques, cross-referencing with multiwavelength catalogs, in close collaboration with:
- 5. A *Public Access* task group, which will guarantee the development and implementation of the tools necessary for robust and effective access to the survey products by the community, both through specialized channels and through the NVO.
- 6. An *Education and Outreach* group, which will develop outreach materials to be implemented both at AO and at participating institutions, and will organize workshops with student participation at both the undergraduate and graduate levels.
- 7. A *Follow-up and Coordinated Multiwavelength Observations* group, which will organize and coordinate observations in support of ALFALFA by members of the team.





## ALFALFA Oversight Committee:

Riccardo Giovanelli  
Martha Haynes  
Lyle Hoffmann  
Emmanuel Momjian  
Noah Brosch  
Brian Kent

### Task Group

### Lead

Observing, Data Validation, Bookkeeping  
Data Processing  
Public Access  
Education & Outreach  
Follow-up Coordination

Martha Haynes  
Riccardo Giovanelli  
" "  
Rebecca Koopmann  
& Martha Haynes  
Noah Brosch



ALFALFA



Currently we (RG, MH) have funding support in the form of 2 NSF grants to carry out initial work for ALFALFA and development of NVO-oriented software development, as well as a grant from the Brinson Foundation;

- NSF grant for R. Koopmann (Union) to organize Undergraduate involvement in ALFALFA and a July '05 Workshop
- Request submitted for joint NSF/Israel Research Council for support of follow-up work at Wise Observatory, w/N. Brosch.

### Funding Recommendation to Foreign Colleagues:

- Consider submitting joint US/Other National Funding Agency requests to support observing/data reduction/periodic meetings/follow-up activities



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# NSF /AST Senior Review



- The NAIC is fully funded by the US National Science Foundation.
- Cornell was recently awarded a 5 year contract for operations (following competition); however, the funding has only been set for 18 months, pending the outcome of the 2005 AST Senior Review.
- NSF has publicly stated it wishes to "reallocate" \$30M/year out of current facility operations (~\$130M/year, of which NAIC is \$10M) to support new initiatives.
- NSF is developing a series of options as to how to perform this reallocation. The "Senior Review" panel will then advise NSF on those options, and possibly, propose its own.
- The Radio, Millimeter and Submillimeter Planning Group, chaired by MPH, is preparing input to the Senior Review on behalf of the US RMS community; see <http://www.astro.cornell.edu/~haynes/rmspg>

**NAIC support is incumbent on reflecting US science priorities**



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