



# REPORT ON THE RADIONET3 NETWORKING ACTIVITY

## TITLE: GERMAN ALMA COMMUNITY DAYS 2013

DATE:	05-06 NOVEMBER 2013	TIME: 2 DAYS	
LOCATION:	BONN, GERMANY		
MEETING WEBPAGE:	http://www.astro.uni-bonn.de/ARC/alma2013.shtml		
HOST INSTITUTE:	ARGELANDER-INSTITUT FÜR ASTRONOMIE		
PARTICIPANTS NO:	54 (REGISTERED)		





### **R**EPORT:

#### 1. Programme of the meeting

#### Tuesday, November 5

All presentations took place in the lecture hall 0.012.

09:30 - 10:00 Registration, coffee & tea

#### Early Science with ALMA

- 10:00 10:10 Welcome & Logistics F. Bertoldi (AlfA, ARC), S. Mühle (AlfA, ARC)
- 10:10 10:40 The Atacama Large Millimeter/submillimeter Array P. Schilke (Univ. of Cologne, ARC)
- 10:40 11:00 The first years of ALMA science: a summary of Early Science results M. Maercker (AlfA, ARC)
- 11:00 11:20 Disks in (high-mass) star forming regions with ALMA Á. Sánchez-Monge (Univ. of Cologne, ARC)
- 11:20 11:35 Short break
- 11:35 11:55 Unwinding the secrets of thermal pulses and sculpted winds: ALMA observations of R Sculptoris M. Maercker (AlfA, ARC)
- 11:55 12:15 Nitrogen Nucleosynthesis C. Henkel (MPIfR)
- 12:15 12:35 More than LESS: Results from the ALMA survey of the Extended Chandra Deep Field South A. Karim (AlfA)
- 12:35 12:55 ALMA observations of high-J CO transitions in high-z SMGs and QSO hosts -A. Weiss (MPIfR)
- 13:00 14:00 Lunch (in the lobby)

#### ALMA in Cycle 2

14:00 - 14:30	ALMA procedures:	from a proposal t	o delivered data -	S. Randall (ESO, AR	C)
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- 14:30 14:50 Support for (prospective) ALMA users S. Mühle (AlfA, ARC)
- 14:50 15:05 The CASA simulator S. Burkutean (AlfA, ARC)
- 15:05 15:15 ARTIST R. Schaaf (AlfA, ARC)
- 15:15 15:45 Coffee & Tea
- 15:45 16:05 ALMA in Cycle 2 M. Zwaan (ESO, ARC)
- 16:05 16:30 Polarization prospects with ALMA F. Alves (AlfA, ARC)
- 16:30 16:50 myXClass T. Möller (Univ. of Cologne, ARC)
- 19:00 Dinner at a nearby restaurant

#### Wednesday, November 6

The tutorials took place in room 0.008 and the ARC room (U1.008).

#### ALMA proposal clinic

10:00 - 13:00 ALMA-OT tutorials

- Beginners level (room 0.008)
  - Tutors: A. Biggs (ESO, ARC), S. Burkutean (AlfA, ARC), Á. Sánchez-Monge (Univ. of Cologne, ARC), R. Schaaf (AlfA, ARC)





• Advanced level (room U1.008)

Tutors: S. Randall (ESO, ARC), F. Alves (AlfA, ARC), M. Maercker (AlfA, ARC), S. Mühle (AlfA, ARC), S. Mühle

ARC)

13:00 - 14:00 Lunch

14:00 - 17:00 One-on-one help with draft proposals

Room U1.008 (ARC room)

Tutors: F. Alves (AlfA, ARC), A. Biggs (ESO, ARC), M. Maercker (AlfA, ARC), S. Mühle (AlfA, ARC), S. Randall (ESO, ARC)

coffee & tea served in between

#### 2. Scientific Summary

The Atacama Large Millimeter/submillimeter Array (ALMA) has been inaugurated in March 2013. Since the start of its Early Science operations, it has already produced spectacular scientific results and continues to do so during the current observations (Cycle 1). The next cycle of operations (Cycle 2) will again offer an increase in sensitivity, spatial resolution and observing modes. The call for proposals, detailing all the new features and capabilities, was published in late October, with a deadline on December 5. For a review of the Early Science done with ALMA so far and to prepare the community for Cycle 2, the German ARC node organized the German ALMA Community Days 2013 at the Argelander-Institut für Astronomie in Bonn on 5-6 November 2013. On the first day of the meeting, various talks presented new tools and new capabilities of ALMA in Cycle 2, the basics of proposal preparation/review and

the support available to (prospective) ALMA users. The second day was dedicated to hands-on work in workshops for novice users as well as for advanced users. The meeting also featured several ALMA science talks and offered an excellent opportunity to network with other users and ALMA support staff.

The six talks on ALMA Early Science results covered a broad range of topics, from the study of disks around high-mass stars to exciting results from galaxies at high redshifts. This section of the programme showed how ALMA can be help scientific progress in a wide variety of research areas and may have inspired new ideas for ALMA projects among the audience. In the afternoon, the description of ALMA's capabilities in Cycle 2, ALMA procedures and the support infrastructure offered a lot of practical information for prospective ALMA users. In addition, some software tools for ALMA users, mostly developed by the German ARC node, were presented. On the second day, the participants split into two groups, depending on their proficiency with the ALMA-OT, the software needed to prepare and submit ALMA proposals. The beginners' group listened to an introduction to the ALMA-OT and then, outfitted with new knowledge and ideas, worked on creating draft proposals in their own field of research under the guidance of the tutors. More advanced users of the ALMA-OT were presented with an overview of the new features of the latest version of the ALMA-OT, before they tried their hands at this version with the assistance of ARC experts. The workshop held in the afternoon allowed the participants to (continue to) work on their own ALMA proposals with the help of knowledgeable ARC staff.

The German ALMA Community Days were very well attended, despite a similar event held at ESO, Garching, only 2 weeks later. In addition to the 54 registered participants, many astronomers from the host institute and the nearby Max-Planck-Institut für Radioastronomie attended the talks on the first day without prior registration. The tutorials and workshop of the proposal clinic on the second day were filled to capacity, but fortunately everyone on the waiting list could be accommodated due to last minutes cancellations. Participants included all stages of





scientific careers students to professors, with the majority being young postdocs, students and senior postdocs, the main target group for this event. Most participants were affiliated with the nearby major centres for radio astronomy in Germany, the Max-Planck- Institut für Radioastronomie, the Argelander-Institut für Astronomie and the I. Physikalisches Institut of the Universität zu Köln, although there were also a number of participants from other German and international institutes. The dominance of radio astronomical knowledge is still important for the full exploitation of ALMA Early Science data. More than one third of the participants (37%) were female. While the session "Early Science with ALMA" was dominated by male speakers this year, the presentations in the afternoon session and the tutoring tasks on the second day were well balanced between men and women (4:3, 5:4, 3:2).

#### 3. Attendance list

#### (please see attached list)

A number of this year's participants had also attended the German ALMA Community Days 2012. Most of them attended the advanced tutorial, after they had participated in the beginner's tutorial last year. This indicates that the German ALMA Community Days are well received in the German community and the tutorials serve their purpose.

#### 4. Financial Report / RadioNet3 contribution

The RadioNet3 contribution was €1000 and was used to cover the catering during the two days, while the rest of the expenses were covered by the host institute and the participants themselves. Catering included tea, coffee, cake and fresh fruit on both days as well as a light lunch in the lobby on November 5 for all registered participants. In addition, the RadioNet3 contribution covered the lunch on November 6 for the attending tutors.

#### 5. Conference Proceedings and Web page

All the information regarding this meeting can be found at <a href="http://www.astro.uni-bonn.de/ARC/alma2013.shtml">http://www.astro.uni-bonn.de/ARC/alma2013.shtml</a>. Given the confidential nature of some scientific talks and the extensive public documentation covering the topics of the technical talks, conference proceedings are not foreseen. Instead, with consent of the speaker, the slides of the presentations have been made available for download at <a href="http://www.astro.uni-bonn.de/ARC/almaprog2013.shtml">http://www.astro.uni-bonn.de/ARC/almaprog2013.shtml</a>. Many early science results can also be found in papers and preprints (see <a href="http://telbib.eso.org">http://telbib.eso.org</a> with Instrument = ALMA-Bands for an overview) and in press releases (<a href="http://telbib.eso.org">http://telbib.eso.org</a> with Instrument = ALMA-Bands for an overview) and in press releases (<a href="http://telbib.eso.org/public/">http://telbib.eso.org</a> with Instrument = ALMA-Bands for proposals are available at <a href="http://almascience.eso.org/proposing/call-for-proposals/proposers-guide">http://www.astro.uni-bonn.de/ARC/almaprog2013.shtml</a>. Barted the current calls for proposals are not foreseen. Instead, with consent of the speaker, the slides of the presentations have been made available for download at <a href="http://telbib.eso.org">http://telbib.eso.org</a> with Instrument = ALMA-Bands for an overview) and in press releases (<a href="http://telbib.eso.org/public/">http://www.astro.uni-bonn.de/ARC/</a>. Extensive documentation on ALMA, the ALMA support structure, the different stages of an ALMA project and the current calls for proposals are available at <a href="http://almascience.eso.org/proposing/call-for-proposals/proposers-guide">http://almascience.eso.org/proposing/call-for-proposals/proposers-guide</a>. Further information on the German ARC node and its software tools can be found at <a href="http://www.astro.uni-bonn.de/ARC/">http://www.astro.uni-bonn.de/ARC/</a>. The software ALMA-OT u

## German ALMA Community Days 2013

Participant Institution Signature Felipe Alves Argelander-Institut für Astronomie Argelander-Institut für Astronomie Frank Bertoldi Henrik Beuther Max-Planck-Institut für Astronomie European Southern Observatory Andy Biggs Max-Planck-Institut für Radioastronomie Biagina Boccardi Sandra Burkutean Argelander-Institut für Astronomie Max-Planck-Institut für Radioastronomie **Rosie Chen** I. Physikalisches Institut der Universität zu Köln Rumpa Choudhury Max-Planck-Institut für Radioastronomie Timea Csengeri Ancor Damas Segovia Max-Planck-Institut für Radioastronomie Elvire De Beck Max-Planck-Institut für Radioastronomie Davide Fedele Max-Planck-Institut für Extraterrestrische Physik Max-Planck-Institut für Astronomie Siyi Feng Max-Planck-Institut für Radioastronomie Juan A. Fernández Ontiveros Institut de Ciències de l'Espai Josep Miquel Girart Max-Planck-Institut für Radioastronomie Yan Gong Argelander-Institut für Astronomie Nikhel Gupta Max-Planck-Institut für Radioastronomie Nanase Harada Christian Henkel Max-Planck-Institut für Radioastronomie Max-Planck-Institut für Radioastronomie Talayeh Hezareh Katharina Immer Max-Planck-Institut für Radioastronomie Eva Jütte Astronomisches Institut der Ruhr-Universität-Bochum Vassilis Karamanavis Max-Planck-Institut für Radioastronomie Alexander Karim Argelander-Institut für Astronomie Denise Keller Max-Planck-Institut für Radioastronomie

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Franz Kirsten	Argelander-Institut für Astronomie
Busaba Kramer	Max-Planck-Institut für Radioastronomie Guach
Thomas Krichbaum	Max-Planck-Institut für Radioastronomie R. Unill
Silvia Leurini	Max-Planck-Institut für Radioastronomie
Lijie Liu	Max-Planck-Institut für Radioastronomie
Matthias Maercker	Argelander-Institut für Astronomie
Benjamin Magnelli	Argelander-Institut für Astronomie
Marko Mecina	University of Vienna Markey
Thomas Möller	1. Physikalisches Institut der Universität zu Köln
Lydia Moser	1. Physikalisches Institut der Universität zu Köln hydro Mar
Stefanie Mühle	Argelander-Institut für Astronomie
Alice Pasetto	Max-Planck-Institut für Radioastronomie
Juan-Pablo Perez-Beaupuits	Max-Planck-Institut für Radioastronomie
Suzanna Randall	European Southern Observatory
Armin Rasekh	Argelander-Institut für Astronomie
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Dominique Sluse	Argelander-Institut für Astronomie
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Sümeyye Suri	Bonn-Cologne Graduate School
Richard Teague	Max-Planck-Institut für Astronomie
Pablo Torne	Max-Planck-Institut für Radioastronomie
James Urquhart	Max-Planck-Institut für Radioastronomie Folge
Axel Weiss	Max-Planck-Institut für Radioastronomie
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