

1st German SKA Bulletin**March 16, 2015**

Dear colleagues,

you are reading the first edition of the German SKA Bulletin. This Bulletin will keep you updated about

- the status of the SKA project,
- important developments in the SKA organization,
- the status of the German SKA involvement,
- upcoming events.

The distribution of the Bulletin is via the GLOW-SKA mailing list and please feel free to share it with colleagues.

To join the mailing list please send an e-mail to:

glowska-join@lists.mpifr-bonn.mpg.de

SKA Organisation Membership:

Current members are Australia, Canada, China, Germany, India, Italy, New Zealand, South Africa, Sweden, The Netherlands and the United Kingdom. More countries showed their interest in joining the SKA, among them France, Japan, Switzerland, Spain and Portugal.

The German membership will end by the middle of this year, as announced by the BMBF last year. However since this announcement the German SKA community is working hard to convince the German authorities to rejoin the SKA project in the near future and therefore to secure full industrial and scientific participation in the SKA project.

SKA at Deutscher Bundestag:

An informal expert meeting with members of the Bundestag took place on January 28, 2015. See also:

http://www.stefan-kaufmann.de/fileadmin/user_upload/brief_aus_berlin/2015-02-02_Brief_aus_Berlin_02-2015.pdf

German contributions to SKA Pathfinders:

The Max Planck Institute for Radio Astronomy is going to build a set of receivers for **MeerKAT**. See also:

<http://www.mpifr-bonn.mpg.de/mitteilungen/2014/9>

German industrial involvement in **MeerKAT** led to the construction of a new panel manufacturing facility in South Africa by the Schauenburg Group: <http://schauenburg.com/en/news/news-press-release?page=1>

Several German research institutes and universities are involved in **LOFAR**. Most recently the **sixth German LOFAR station** DE609 near Norderstedt has been connected to the International LOFAR Telescope, see also <https://lofar.physik.uni-bielefeld.de/>

SKA Science Book:

Following last years workshop "Advancing Astrophysics with the SKA", the new Science Book is currently being prepared and will be published in the on-line journal Proceedings of Science. German authors are the third biggest community who contributed to this science vision.

Most contributions to the new Science Book have already been submitted to arXiv.org and the release of the cosmology papers was flanked by a press release, which has been echoed very well. For a summary of the response of German speaking media see:

<http://www3.mpifr-bonn.mpg.de/staff/junkes/pr/links-ska>

SKA Science Priorities:

The SKA Science Priorities have been studied and discussed over the last year and a list of highest science priorities has been published:

<http://astronomers.skatelescope.org/wp-content/uploads/2014/10/SKA-TEL-SKO-0000122-SCI-REQ-RE-01-SKA1SciencePrioritiesOutcome.pdf>

Re-baselining Decision:

In parallel to the science priorities the SKA baseline design has been studied carefully and in its March meeting the board of the SKA organisation came to a re-baselining decision.

Accordingly, **SKA phase 1** will include:

- a low frequency instrument (50 - 350 MHz) in Australia (SKA LOW) with a collection area of 0.4 square kilometres.
- a mid frequency instrument (350 MHz - 14 GHz) in South Africa (SKA MID), incorporating MeerKAT, which is already under construction.

Both instruments will be capable of transformational scientific discoveries. They will significantly improve on sensitivity, resolution and survey speed compared to all existing instruments, including those still under construction

currently. The complete package fits into the cost cap for the construction of **SKA phase 1 of 650 MEuros.**

The Australian SKA Pathfinder (ASKAP), also already under construction, will be included as a test bed for the further development of focal plane arrays, which will be essential for the second phase of SKA.

Further details can be found on the SKA web site: <https://www.skatelescope.org/news/worlds-largest-radio-telescope-near-construction/>

SKA Headquarter Decision:

Bids from Italy and the UK have been received. A final decision is expected within a few weeks from now. Currently, the office of the SKA Organisation is located at Jodrell Bank near Manchester, UK.

GLOW SKA:

At its annual meeting, which took place at the FZ Jülich in November 2014, the German Long Wavelength (GLOW) consortium elected Dominik Schwarz (Bielefeld University) and Michael Kramer (Max Planck Institute for Radio Astronomy, Bonn) as chair and vice-chair of the GLOW SKA working group. Hans-Rainer Klöckner (also MPIfR, Bonn) will act as the working groups secretary.

Upcoming events:

SKA Key Science Project Workshop, Stockholm, August 24 - 27, 2015
registration deadline: **March 27, 2015**
<https://indico.skatelescope.org/conferenceDisplay.py?confId=342>

Please continue to support the German participation in the SKA project. In order to get in touch with us, send an e-mail to ska@mpifr-bonn.mpg.de or contact one of us directly.

Best wishes,

Dominik Schwarz
Michael Kramer
Hans-Rainer Klöckner

(for the GLOW SKA Working Group)