

Media Release

CSIRO sets science path for new telescope

Reference: 09/159

CSIRO has chosen the major science projects that its Australian SKA Pathfinder (ASKAP) telescope will tackle in its first five years.

9 September 2009

ASKAP, being developed for a site in Western Australia, is expected to be fully operational in 2013. Construction is due to start later this year.

"ASKAP is open to projects from astronomers from all over the world, with projects determined according to their scientific merit, and operational feasibility," CSIRO SKA Director Professor Brian Boyle said.

"Since 2008 we've had an open, international process to determine the key scientific questions ASKAP will address."

During the telescope's first five years at least 75 per cent of its time will be used for large Survey Science Projects, each needing more than 1500 hours to complete and designed to take advantage of ASKAP's unique capabilities.

"An international panel of expert astronomers picked the 10 top projects that will take advantage of ASKAP's huge survey speed and large field of view," Acting Director of the Australia Telescope National Facility Dr Lewis Ball said.

"These projects address widely recognised astrophysical issues and their results will be important for the broad astronomical community."

A breakdown of the 10 projects illustrates the international interest in the ASKAP program.

The projects represent 363 unique authors from 131 institutions. The breakdown of unique authors by region was 33 per cent Australia and New Zealand, 30 per cent North America, Europe 28 per cent, 9 per cent rest of world.

Two of the top 10 projects are an Evolutionary Map of the Universe (EMU) and the Widefield ASKAP L-Band Legacy All-Sky Blind Survey (WALLABY).

EMU is a deep survey for star-forming galaxies and active galactic nuclei, designed to trace the evolution of star-forming galaxies and massive black holes through the history of the Universe.

WALLABY is a survey for galaxies containing neutral hydrogen gas over 75 per cent of the entire sky, and is aimed at improving our understanding of galaxy formation.

Other Survey Science Projects will study variable and transient radio sources, the interstellar medium of our own Galaxy, magnetic fields in space, and pulsars.

A complete list of the projects can be found at:
http://www.atnf.csiro.au/news/press/askap_survey_science.html

ASKAP, as well as being a world-leading telescope in its own right, will be an important test-bed for the future Square Kilometre Array (SKA), an international radio telescope that when built, will be the world's largest and most powerful.

Read more media releases in our [Media](#) section.



Artist's impression of ASKAP antennas at the Murchison Radio-astronomy Observatory. Image: Swinburne Astronomy Productions and CSIRO

Media Resources

- Download image at: [CSIRO sets science path for new telescope](#)
- A complete list of the projects: [ASKAP Survey Science Projects](#) [1.1MB PDF, external link]

Contact Information

Science Contacts

Dr Brian J Boyle

CSIRO SKA Director
Australia Telescope National Facility
Phone: 61 2 9372 4300
Alt Phone: 0418 882 166
Fax: 61 2 9372 4310
Email: Brian.Boyle@csiro.au

Dr Lewis Ball

Acting Director
Australia Telescope National Facility
Phone: 61 2 9372 4300
Fax: 61 2 9372 4310
Email: Lewis.Ball@csiro.au

Media Contact

Ms Helen Sim (BSc MSc Soc GradDipPubRel)

Media and Public Relations
Australia Telescope National Facility
Phone: 61 2 9372 4251
Alt Phone: 0419 635 905
Fax: 61 2 9372 4444
Email: Helen.Sim@csiro.au

Related Links

[Media](#)

[Australia Telescope National Facility](#)

[ASKAP overview](#) [external link]

[Dr Brian Boyle: Director, CSIRO](#)

[Australia Telescope National Facility](#)