

Triennium Report 2011-2014 of Commission J

This is a brief summary of the activities of Commission J and the developments in radio astronomy during this triennium. Support of conferences and workshop that were supported financially and technically are listed, as are the topics for sessions at the Beijing GASS. Commission J does not currently have any Working Groups.

1. Officers of Commission J for this triennium:

Chair: Justin Jonas, Rhodes University, South Africa

Vice-chair: Willem Baan, ASTRON, Netherlands

Past-chair: Subramaniam Ananthakrishnan, Pune University, India

2. Terms of Reference for Commission J

The activities of the Commission include:

- observation and interpretation of cosmic radio emissions from the early universe to the present epoch and
- radio reflections from solar system bodies

Emphasis is placed on:

- The promotion of science-driven techniques for making radio-astronomical observations and data analysis,
- Support of activities to protect radio-astronomical observations from harmful interference.

3. Finances

To date a total of €3600 has been used to support young scientist attendance at selected meetings (see table below). This leaves a balance of €5400.

4. Support of meetings and workshops

The following meetings and workshops were provided with moral and/or financial support.

Meeting	Country	Date	Support for young scientists
Radio and Antenna Days of the Indian Ocean (RADIO 2012)	Mauritius	24-27 Sept 2012	€1000
IconSpace 2013	Malaysia	1-3 July 2013	
AP-RASC'13	Taiwan	3-7 Sept 2013	€1000

IEEE AFRICON 2013	Mauritius	9-12 Sept 2013	€1000
International Conference on Microwaves and Photonics (ICMAP 2013)	India	13-15 Dec 2013	
Regional Conference on Radio Science	India	2-5 Jan 2014	€600
Radio and Antenna Days of the Indian Ocean (RADIO 2014)	Mauritius	7-10 April 2014	

5. Vice-chair and Early Career Representative nominees.

Yihua Yan (NAO, China) and Richard Bradley (NRAO, USA) are the two nominees for Vice-chair of Commission J. Andrew Siemion (UC Berkeley, USA) and Stefan Wijnholds (ASTRON, Netherlands) have been nominated as Early Career Representatives.

6. Square Kilometre Array

Having been conceptualized within a Commission J working group on large telescopes, the SKA has now progressed to a stage of significant maturity. The SKA Organization has been established under the leadership of Phil Diamond as Director General, with headquarters based in the UK. The SKAO is working in conjunction with international consortia to design the elements of the SKA. Australia and Africa have been selected as the hosts for the SKA telescopes, and precursor instruments are being commissioned on both sites. Phil Diamond will be presenting one of the General Lectures at the Beijing GASS.

7. Beijing URSI GASS Scientific Sessions

The topics of the scientific sessions for the Beijing GASS were chosen to match the exciting developments in radio astronomy across the globe, and indeed in space too. There are a total of 89 oral presentations (excluding the Tutorial and General lectures) and 25 poster papers.

Session	Title	Papers
J01	Radio Astronomy in China	4
J02/03	Observatory Reports	10
J04/05	New Generation Radio Telescopes	11
J06	Polarization and magnetic fields from the solar system to the CMBR	6
J07/08	Observing the mm and sub-mm Universe: from the CMBR to local molecules	7
J09/10	Probing the Hydrogen Universe	9
J11/12	Correlation, calibration and imaging across all wavelengths	11

J13	Solar radio emission: astrophysics and space weather applications	6
J14/15	Time Domain Radio Astronomy: An example of Big Data in astronomy	5
J16/17	Latest observations and results	8
J18/19	Antennas, detectors and receivers for new generation radio telescopes	7
JT	Enabling technologies for modern radio astronomy	
JP	Poster Session	25
EJ10/02	Spectrum Management (joint with Commission E)	5

8. Awards

The following distinguished Radio Astronomers were awarded deserved honours during the triennium, and we congratulate them.

2014 Catherine Wolfe Bruce Gold Medal:	Kenneth Kellermann, NRAO, USA
Order of Oranje-Nassau:	Arnold van Ardenne, ASTRON, Netherlands
Grote Reber Medal:	Nicolay Kardashev, Lebedev Physical Institute, Russia (2012)
	James Moran, Harvard, USA (2013)
	Ron Ekers, CSIRO, Australia (2014)

Ron Ekers will be presented the 2014 Reber Medal at the Beijing GASS prior to giving the Commission J Tutorial Lecture.