



# IEEE

## IEEE South Australia Section

### Annual Distinguished Lecture and Dinner

The IEEE South Australia Section Committee invites you and your partner to the Annual Dinner and Lecture:

### On the threshold - New understanding, New discoveries and New opportunities with the SKA

**Prof. Peter Quinn (FTSE)**

**Executive Director of International Centre for Radio Astronomy Research (ICRAR),  
University of Western Australia**



Date: 9 December 2014

Time: Pre-dinner Drinks 6:30 pm - 7:00 pm  
Dinner & Lecture 7:00 pm - 10:00 pm

Venue: South Australian Museum, North Terrace, Adelaide

### Three Course Dinner and Drinks

RSVP: Remove the slip below and return completed to IEEE SA Section by 2nd December 2014  
Dress Code: Neat Casual

**Return to:**  
IEEE SA Section  
PO Box 53  
Elizabeth SA 5112

Phone: (08) 7389 6875  
Fax: (08) 7389 7181

E-mail: [south.australia@ieee.org](mailto:south.australia@ieee.org)

Name \_\_\_\_\_

Address \_\_\_\_\_  
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\_\_\_\_\_

Phone/Email \_\_\_\_\_

Special dietary requirements \_\_\_\_\_

Method of payment  EFT  Cash  Visa  MasterCard

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#### 2014 Annual Lecture and Dinner

Sign up for:	Price
<input type="checkbox"/> IEEE Member	\$65
<input type="checkbox"/> Member's partner. Name: _____	\$65
<input type="checkbox"/> Non-member	\$85
<input type="checkbox"/> Non-member's partner. Name: _____	\$85
<input type="checkbox"/> IEEE Student Member	\$40
<input type="checkbox"/> Student member's partner. Name: _____	\$40

Total: \_\_\_\_\_

All prices include GST.

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IEEE South Australia Section Distinguished Annual Lecture

*On the threshold - New understanding, New discoveries  
and New opportunities with the SKA*

**Prof. Peter Quinn (FTSE)**

Executive Director of International Centre for Radio Astronomy Research (ICRAR),  
University of Western Australia

Mankind's understanding of Nature is now at a point of crisis. More than 95% of the Universe we live in is composed of mysterious stuff - matter that is hidden from the view of our telescopes and a form of energy that is tearing the Universe apart. Our two most successful theories of Nature - the theory of atoms and the theory of Gravity - cannot together describe the Big Bang which formed the Universe 13.7 billion year ago. We need a new idea, a new concept that will provide us with a consistent picture of the evolution of our Universe and its contents. New ideas flow from discoveries. Our ability to explore, and map and make discoveries within our Universe is about to be exploded by more than a factor of 10,000. The Square Kilometre Array (SKA) radio telescope will revolutionize our view of the Universe. It will push the boundaries of our knowledge back in time to the formation of the first stars and galaxies. It will also push the boundaries of our technology and will provide new industrial, educational, scientific and technological opportunities in the 21st century.

**Biography**

Prof. Peter Quinn was born in Australia and received his BSc(Hons) in Mathematics and Physics from the University of Wollongong in 1978 where he received the University Medal in Physics. He conducted graduate studies in astronomy and astrophysics at the Australian National University and received his PhD in 1982. During postdoctoral appointments in Theoretical Astrophysics at the California Institute of Technology (1982-1985) and the NASA Space Telescope Science Institute (1985-1989) Prof. Quinn pursued his research interests in galaxy formation and dynamics, cosmology and dark matter using supercomputing facilities at Los Alamos National Laboratory and the Pittsburgh Supercomputer Centre. In 1989, Prof. Quinn took up a Research Fellowship in the Research School of Astronomy and Astrophysics at ANU to lead the Australian involvement in the MACHO Dark Matter Search Project. The project's first detection of dark matter candidates was highlighted on the front cover of Nature in 1991. His work on computational astrophysics was awarded a NASA High Performance Computing and Communications Grand Challenge Award in 1992. Prof. Quinn's research has resulted in more than 300 publications and he has been recognized as an ICI highly cited researcher with a special focus on computational cosmology and dark matter research.

In 1995, Prof. Quinn accepted a position as Division Head of the newly formed Data Management and Operations Division at the European Southern Observatory headquarters in Munich. While at ESO, Prof. Quinn lead the efforts to design, implement and operate the science data flow system for the 1 billion Euro ESO Very Large Telescope (VLT), the world's largest optical and infrared observatory. This work was awarded a Computerworld 21st Century Achievement Award for Science in June 2005. In December 2005, Prof. Quinn was awarded a Western Australian Premier's Fellowship and took up the position of Professor of Astronomy and Astrophysics at the University of Western Australia in August 2006. In December 2008, Prof. Quinn was appointed inaugural director of the new International Centre for Radio Astronomy Research (ICRAR), a centre funded by the WA Government, UWA and Curtin University. ICRAR is focused on research excellence in astronomical science and technologies directed towards making fundamental contributions to the realization and scientific success of the SKA and delivering broader benefits to the WA and Australian communities. Prof. Quinn currently chairs the Australian Astronomical Observatory Advisory Committee and is Deputy Chair of the Australian and New Zealand SKA Coordination Committee. Prof. Quinn became WA Scientist of the Year in 2012 and was made a Fellow of the Australian Academy of Technological Sciences and Engineering in 2013.