

BOLTON SYMPOSIUM 2020

Schedule

9:30-9:40 AM ARRC Auditorium	Welcome <i>Katie Jameson, Shi Dai, Tessa Vernstrom</i>
9:40-9:55 AM ARRC Auditorium	The Life & Times of John Bolton: Who he was and his impact on Astronomy <i>Ron Ekers</i>
9:55-11:00 AM ARRC Auditorium	Talks Session 1 <i>Alphabetical, 1 min for senior researchers, 5+1 min for ECR</i>
11:00-11:30 AM ARRC Seminar Rm	Tea + Coffee
11:30 AM - 1:00 PM ARRC Auditorium	Talks Session 2 <i>Alphabetical, 1 min for senior researchers, 5+1 min for ECR</i>
1:00-2:00 PM ARRC Seminar Rm	Lunch
2:00-2:45 PM ARRC Seminar Rm	Discussion Session 1 – Culture <i>Leaders: Katie, Shi, Tessa</i>
2:45-3:15 PM ARRC Seminar Rm	Break
3:15-4:00 PM ARRC Seminar Rm	Discussion Session 2 – Science/Technical <i>Leaders: Katie, Shi, Tessa</i>
4:00-4:30 PM ARRC Seminar Rm	Discussion Summaries + Close
4:30-6:00 PM ARRC Seminar Rm	Reception (wine and cheese)

Descriptions

The Life & Times of John Bolton: Who he was and his impact on Astronomy

Ron Ekers

In the 1960's I was a PhD student of John Bolton. John was very well known as an astronomical pioneer through his discovery that the "radio stars" were extragalactic nebula and he was invited to Caltech's to build the Owens Valley Radio Astronomy Observatory. He returned to Australia in 1961 as the first director of the Parkes radio telescope. He played a major role in the discovery of QSO's and became one of the key scientists involved in the establishment of the Anglo Australian Observatory. John is perhaps best known as the "Dish Master" portrayed by Sam Neil in the movie "The Dish", however I will talk about the real John Bolton who was a very different character and the legacy of John Bolton's influence on both the AT and the AAO.

Discussion Sessions

Leaders: Katie, Shi, Tessa

These sessions are meant to bring everyone together to discuss current topics in astronomy. We took submissions of topics from ECRs (submitted during registration) and synthesized the following six topics/questions, which are broken down in those concerning culture in astronomy and those that are more focused on science and technical issues. Each group will report back with their ideas and potential future work.

1 – Culture

- A. How should the astronomy community deal with transgressions?
- B. What kind of power do we have as a scientist to make better/fairer the whole Science funding system?
- C. Guidance towards permanent positions: career paths, opportunities, how to gain visibility

2 – Science/Technical

- A. How to design algorithms to search for the unknown patterns that are usually missed by traditional methods?
- B. How to best use GPUs, accelerate code, and/or parallelise code
- C. Finding synergies in techniques and methods between different science areas: Transients and EoR

Talk Order

All talks listed in bold are ECR and will receive 5 min for their presentation + 1 min for questions, all others will receive 1 min. Please upload your slide(s) as a PDF with the following naming convention:

Firstname_Lastname_Bolton2020.pdf

Name	Affiliation	Session	Title
Aidan Hotan	CASS	1	ASKAP and radio astronomy surveys
Alec Thomson	CASS	1	Producing an all-sky RM grid
Andrew Cameron	CASS	1	Chasing new pulsars from the world's most sensitive telescopes
Benjamin McKinley	Curtin University	1	Measuring the global redshifted 21-cm signal using interferometers
Catherine Hale	CASS	1	Studying the Extragalactic Radio Continuum Sky
Charlotte Sobey	CASS	1	Investigating the ISM using polarised pulsars
Chenoa Tremblay	CASS	1	Is this Bump and Wiggle Real?
Cormac Reynolds	CASS	1	High Frequency VLBI
David McConnell	CASS	1	Rapid ASKAP Continuum Survey - status
Dilpreet Kaur	Curtin University-ICRAR	1	Chromatic dispersion in pulsars: how do we measure it reliably?
Elaine Sadler	CASS	1	HI in the distant Universe
Emil Lenc	CASS	1	Mad science
George Heald	CASS	1	Broadband surveys for radio polarimetry
George Hobbs	CASS	1	Crazy applications of pulsar research
Georgios Bekiaris	CASS	1	Galaxy kinematic modelling for everyone and everything!
Guillaume Drouart	ICRAR - Curtin University	1	The GLEAMing of the first supermassive black holes
Ivy Wong	CASS	1	Galaxy evolution science in the ASKAP era
Jimi Green	CASS	1	Parkes' new technology!
Karen Lee-Waddell	CASS	2	HI observations of ESO 601-G036
Katie Jameson	CASS	2	The challenges of interaction
Nick Seymour	ICRAR/Curtin	2	My expertise
Phil Edwards	CASS	2	Radio observations of gamma-ray sources
Philippa Patterson	ICRAR-UWA	2	A Low-Frequency Study of the Magellanic Clouds
Rajan Chhetri	CASS/ICRAR-Curtin	2	Scintillating science - compact objects at low radio frequencies
Ramesh Bhat	Curtin University	2	Pulsar science with the MWA: opportunities and challenges
Robert Hollow	CASS	2	Astronomy Education
Ron Ekers	CASS	2	TBA

Rui Luo	CASS/ATNF	2	A luminosity-guided discovery of a repeating FRB source using the FAST telescope
Sam McSweeney	ICRAR-Curtin University	2	Pulsar microstructure with the MWA
Shi Dai	CASS	2	Discovery of pulsars in the globular cluster Omega Centauri
Shivani Bhandari	CASS	2	Fast radio bursts with ASKAP
Stacy Mader	CASS/Parkes	2	Dark gas in molecular clouds
Steve Prabu	Curtin University	2	TBA
Tessa Vernstrom	CASS	2	Diffuse Radio Emission Below the Noise
Tim Galvin	CASS	2	Host galaxy identification and outlier detection with unsupervised machine learning
Vanessa Moss	CASS	2	Adventures in the Milky Way and beyond, with a focus on radio telescopes
Xiang Zhang	CASS	2	Broadband polarimetry of radio sources from the QUOCCA survey