

# Learning and radio schools

George Hobbs and Philip Edwards 9 November 2022



#### Overview

- Learning
- Radio schools



#### Learning

- Big picture
  - Observer and "observing expert" training (J. Dawson's talk)
  - Education/outreach for teachers, general public, high school students
  - Training (co-supervision) of graduate students
  - User-community training

• R. Hollow

- Radio schools
- Training on specific tools/facilities
- Online material



## CSIRO S&A Research Science Training Activities

V1.5

Contact author: George Hobbs (george.hobbs@csiro.au)

1. 1	SUMMARY							
2.	HISTORY		2					
3.	EXISTING OBLIGATIONS		3					
4.	USE-CASES AND WHAT DO WE WANT TO TEACH?							
5.	TRAINING PROPOSAL		4					
	5.1. Over-arching plan for ATNF community training							
	5.2. CONFLUENCE PAGES		5					
	5.3. TARGETED CO-LEARNIUM TALKS		5					
	5.4. 2022 RADIO SCHOOL(S)	1	Establishing on over on					
	5.5. 2022 DATA PROCESSING WORKSHOP(S)		Establishing an over-are					
	5.6. DIVERSITY AND INCLUSION ASPECTS OF ATNF TRAINING ACTIVITIES	2.	Producing a set of conf					
	5.7. DEVELOPING THE MEANS TO QUANTIFY WHETHER OUR TRAINING ACTIVIT		to the ATNF, including					

LONG-TERM PLANNING AND FUTURE OPPORTUNITIES .....

- 1. Establishing an over-arching plan for ATNF Community training
- Producing a set of confluence pages collating existing training material of relevance to the ATNF, including links to co-learnium talks, previous radio school material, userguides etc.
- Organising targeted co-learnium talks on general topics of relevance to our user community.
- 4. Running a radio school targeted towards graduate students
- Running a data processing workshop targeted towards existing users of our instruments to increase the scientific return and impact of those instruments.
- 6. Exploring the diversity and inclusion aspects of ATNF training activities
- 7. Developing the means to quantify whether our training activities actually work.



#### Expressions of interest

- ... organizing a radio school (see Phil E's presentation)
- ... Parkes UWL training course (see next slide)
- ... development of online learning material (two slides)
- Also comments/suggestions around
  - VLBI workshop
  - CASDA tutorials
  - ...
  - (separately, cryo-PAF information sessions held)



#### Parkes UWL training course

- Plan from Lawrence Toomey, Jane Kaczmarek, George Hobbs
- Planned announcement around now, but may delay.
- To address issues relating to the Parkes UWL
  - Proposing for observations
  - Setting up observations
  - Carrying out the observations
  - Processing the data
- Plan to "crowd-source" questions (and relevant data sets) to be "solved" during public on-line sessions.



### Online training modules and moving forward

- Longer-term consideration: expression of interest submitted by Aidan Hotan et al., relating to development of online training resource that will be available on-demand
- Good idea (and likely other good ideas).

#### 6. Long-term planning and future opportunities

We recommend planning training activities into the future and note that major training activities will soon be required around the Parkes Cryo-PAF and ATCA BigCAT projects. There are now new ways to provide training including online platforms, simulators, virtual reality, etc. We also have a changing user community and more data-driven science. A detailed plan will require significant input from local CSIRO staff, university staff, ATUC, ATSC, the general user community and from likely new users. We can also consider training activities relating to other areas of S&A (e.g., Space activities). We also should start preparing the user community for future instruments such as the SKA.

Action: George Hobbs to bring together a group of people wishing to be involved in longterm planning. This will involve at least one organise a brainstorming session on this topic during 2022.



### Radio schools

No.	Year	Dates	Venue	https://www.atnf.csiro.au/
1	1989	30 Jun – 3 Jul	Marsfield	
2	1991	8 – 11 Jul	Marsfield	
3	1994	26 – 30 Sep	Marsfield	
4	1998	14—18 Sep	Narrabri	
5	2001	24—28 Sep	Narrabri	
6	2003	12—16 May	Narrabri	
7	2006	18 – 22 Sep	Narrabri	whats_on/workshops/synthesis2006
8	2008	29-Sep – 3 Oct	Narrabri	whats_on/workshops/synthesis2008
9	2009	21 – 25 Sep	Parkes	research/radio-school/2009/
10	2010	27 Sep – 1 Oct	Narrabri	research/radio-school/2010/radio_school.html
11	2011	26 – 30 Sep	Parkes	research/radio-school/2011/
12	2012	24 – 28 Sep	Narrabri	research/radio-school/2012/
13	2014	29 Sep – 3 Oct	Narrabri	research/radio-school/2014/
14	2015	28 Sep – 2 Oct	Narrabri	radio-school-2015
15	2017	25 – 29 Sep	Narrabri	research/radio-school/2017/
16	2018	1 – 5 Oct	Geraldton	https://www.icrar.org/conferences/radio-school-2018/
17	2019	20 Sep – 4 Oct	Narrabri	research/radio-school/2019/

28th of September 2017



Radio Astronomy School



#### 3rd of October 2017



Radio Astronomy School

The 2017 CASS Radio Astronomy School concluded successfully last Friday. The image above was taken by Aditya Parthasarathi, using a 30 second exposure while Wasim Raja and Renee Spiewak used chemical torches to add the caption.



5th of October 2018



ICRAR/CASS Radio School 2018 by George Heald



10th of October 2019



The 2019 CASS Radio School by Chenoa Tremblay



#### Radio schools

- "Tell me and I will forget, show me and I may remember, involve me and I will learn"
- ATUC encouragement to resume Radio Schools
- On-line school this year for summer vacation students, new staff, and co-supervised students
- Resume in-person schools next year?
- Can an annual radio school be given accreditation as a university course unit?

### Thank you

George Hobbs (<u>George.hobbs@csiro.au</u>)
Phil Edwards (<u>Philip.Edwards@csiro.au</u>)

