

Measuring Star Formation in the Radio, Millimetre, and Submillimetre

Jodrell Bank Centre for Astrophysics
The University of Manchester
24 – 26 July 2017



Overall Schedule

Monday	09:30	Start
	16:30	Discussion
	17:30	End
Tuesday	09:10	Start
	16:30	Discussion
	17:30	End
Wednesday	09:10	Start
	15:30	Discussion/Conclusions
	16:30	End
<i>Coffee Breaks</i>	10:30-11:00 and 15:00-15:30	
<i>Lunch (prepaid)</i>	12:20-13:40	

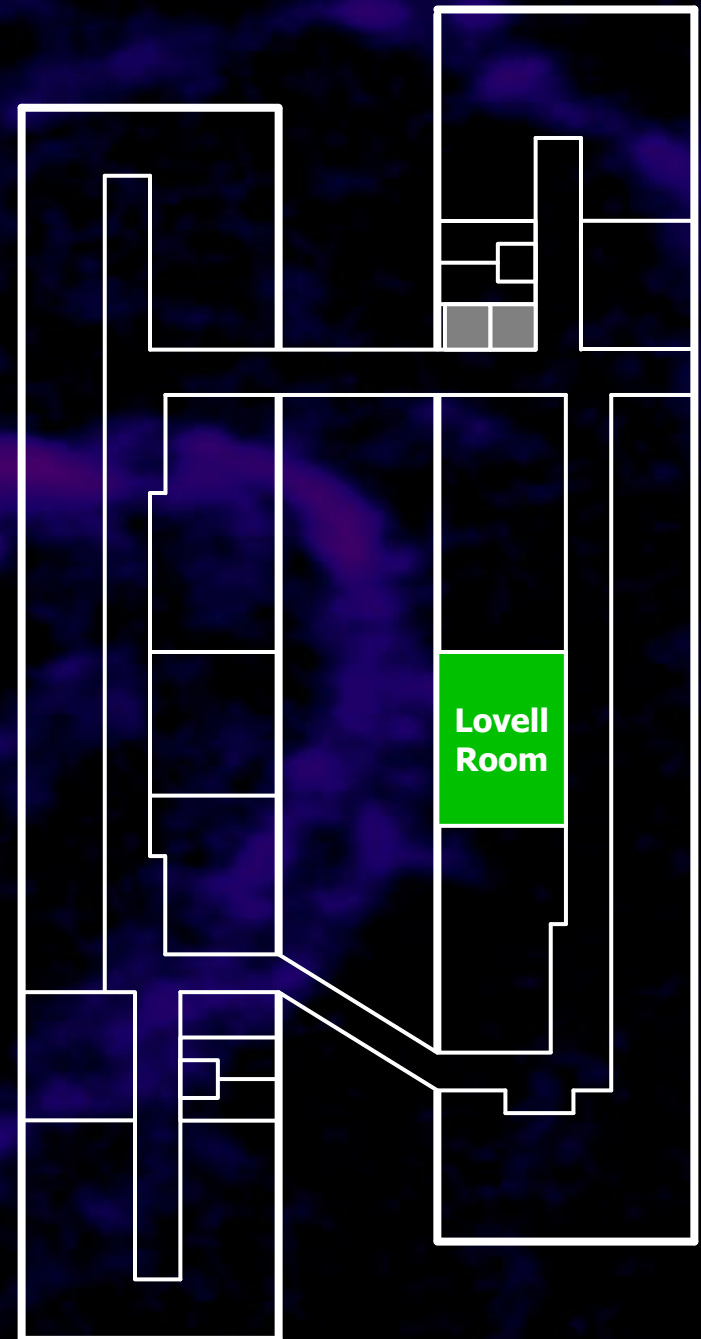
Practical Information

Coffee and Lunch will be served in the Lovell Room.

The ALMA/eMERLIN visitor room is located on the opposite side of the atrium.

Toilets are located to the left, out the double doors (near the lifts) and to the right, across the bridge, and then to the left.

Emergency exits are located across the halls from the toilets



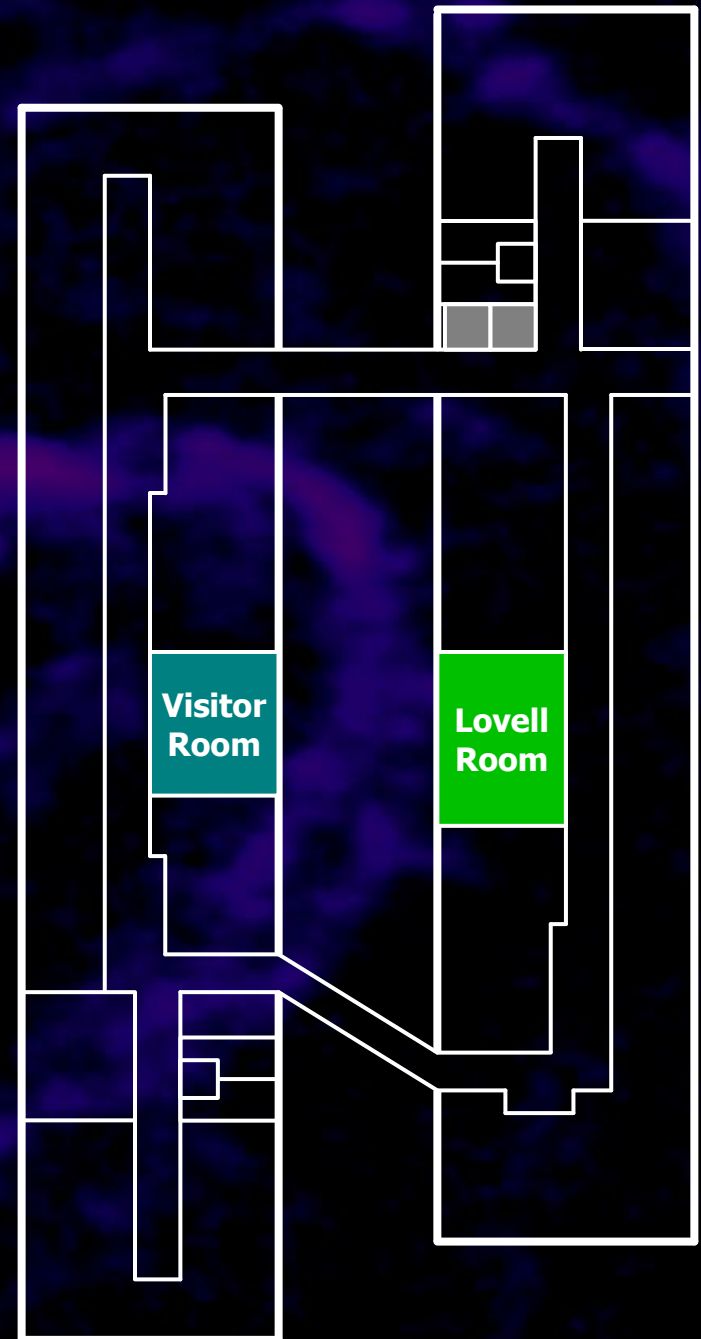
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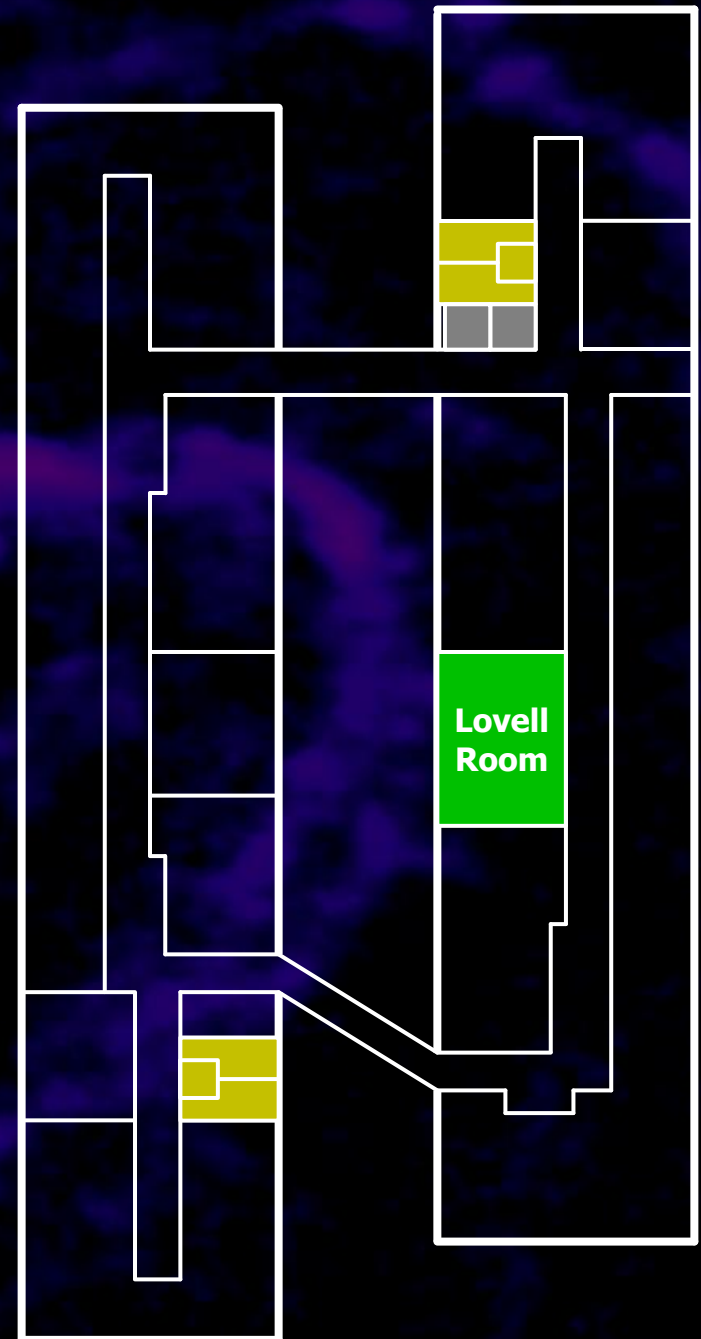
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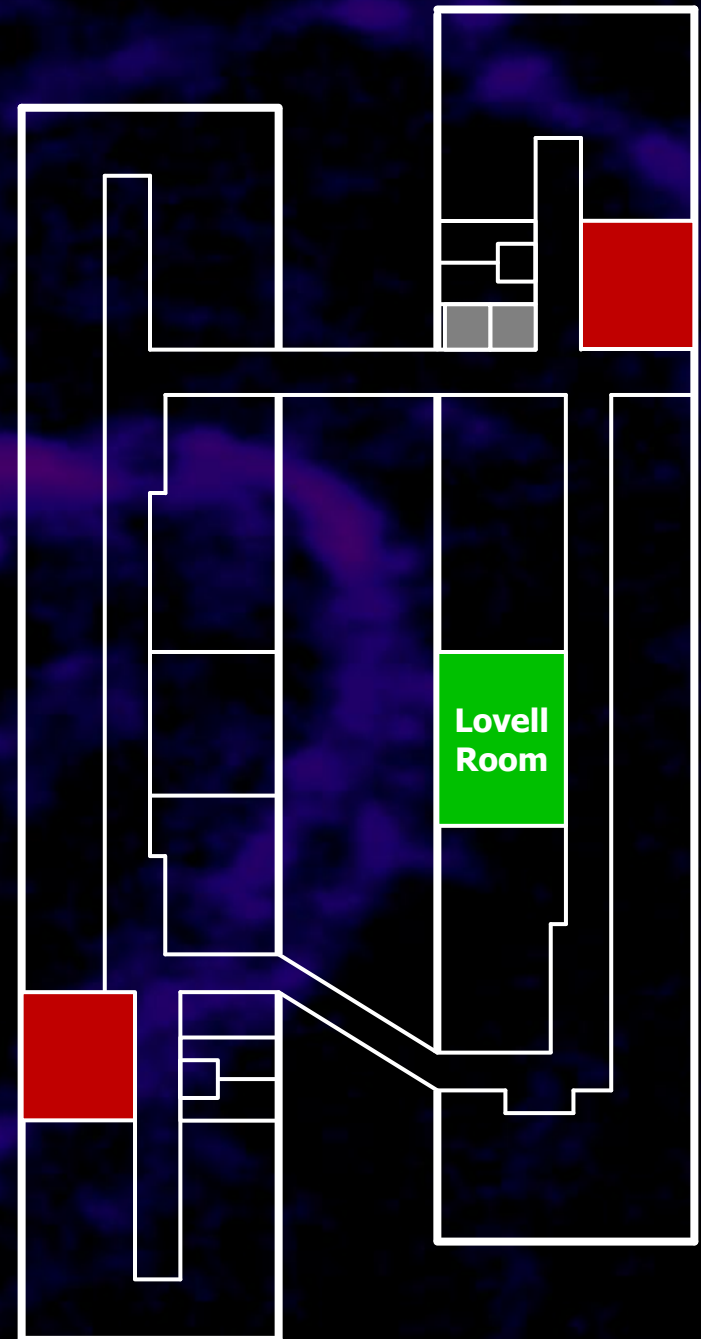
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Talk Preparation

Talks are 15 minutes long with 5 minutes for questions.

Please give your talks to the session chairs before each session.

After the meeting, please send them to George Bendo (george.bendo@manchester.ac.uk) if you would like your talks posted on the meeting website.

Jodcast Interviews

Students and staff at the University of Manchester produce an astronomy-themed podcast called the Jodcast (www.jodcast.net).

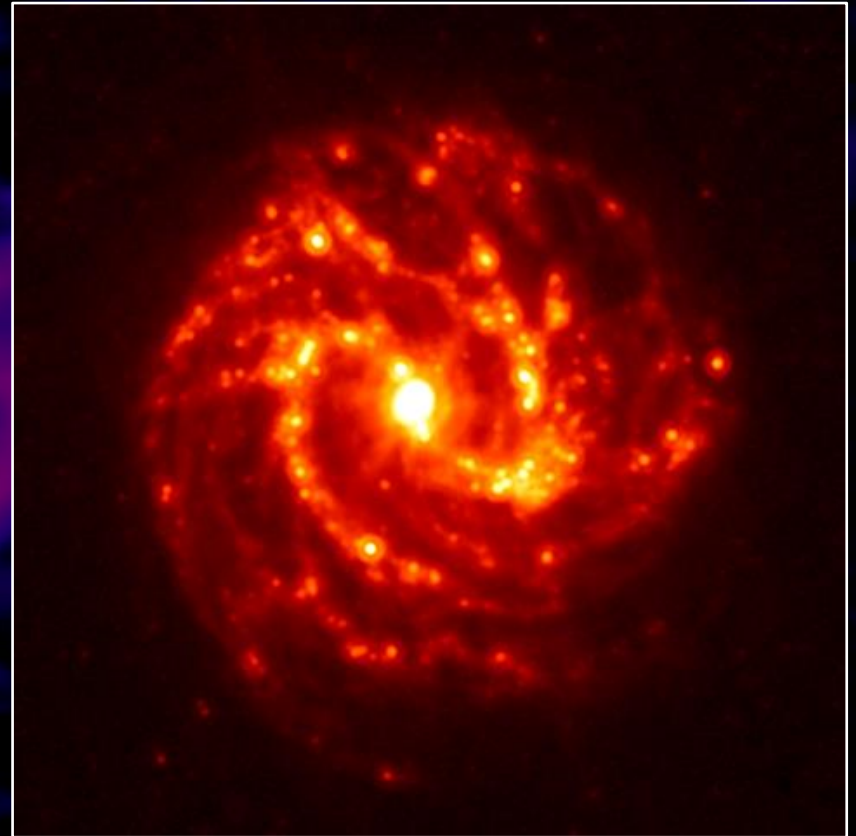
People at this meeting are invited to sign up for interviews with Monique Henson, Josh Hayes, and Tom Scragg.

The inspiration for this meeting comes from both my long-term interest in star formation and my current research activity.

Earlier in my career, I worked on Spitzer observations of nearby galaxies that significantly improved the calibration of infrared emission as a star formation tracer.

At the same time, GALEX observations led to improvements in converting ultraviolet fluxes to star formation rates.

It is now time for radio, millimetre, and submillimetre astronomy to take the next step forward.



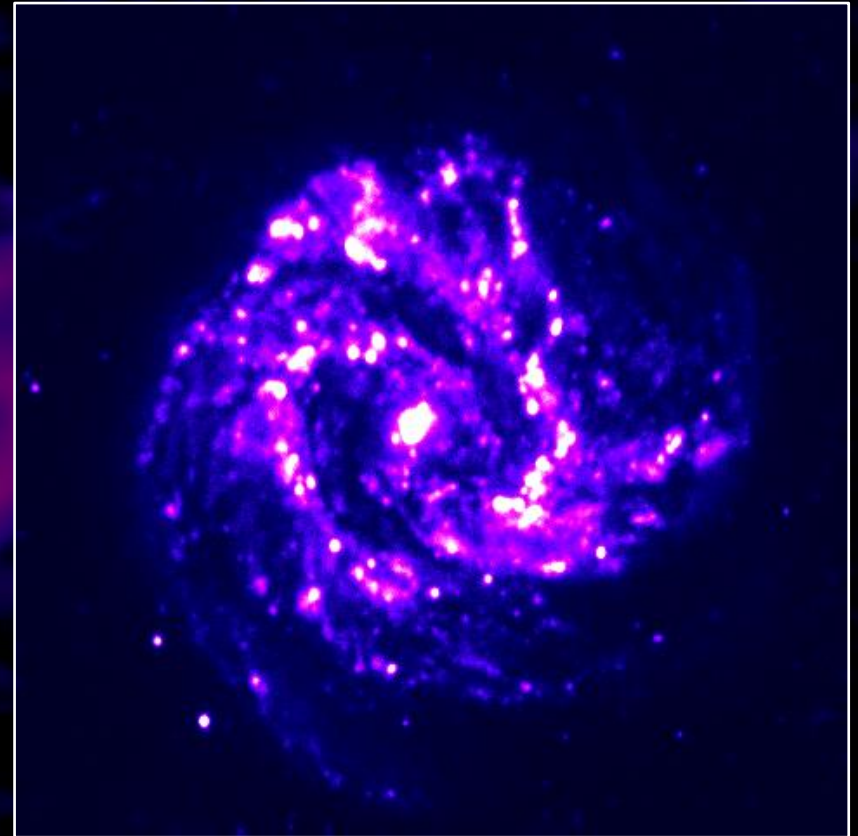
Bendo et al., 2012, MNRAS, 423, 197

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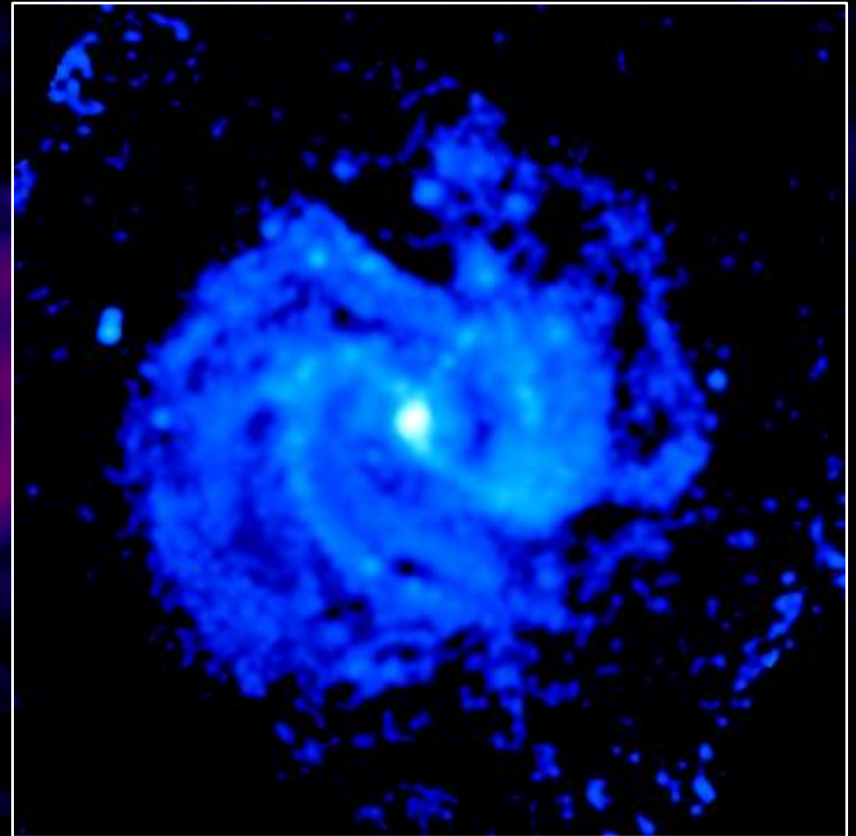
Gil de Paz et al., 2007, ApJS, 173, 185

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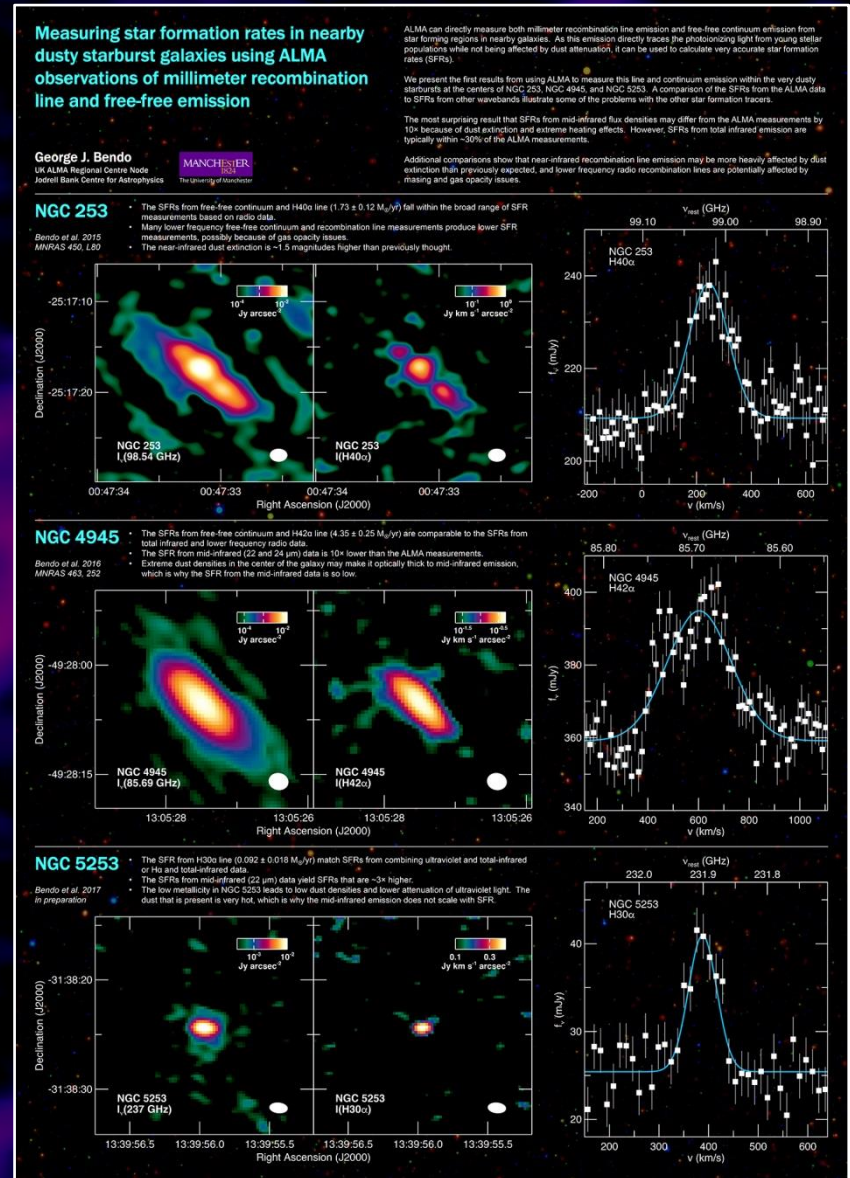
Neininger et al., 1993, A&A, 274, 687

Last September, I attended the Half a Decade of ALMA conference, where I presented my own work on star formation in dusty starbursts.

I met Kouichiro Nakanishi and Rie Miura there, who have also been using recombination lines to study star formation.

I also met with Eric Murphy and Sean Linden, who were presenting their work (with Dillon Dong) on free-free emission in nearby galaxies.

Unfortunately, most of this research was relegated to the poster session.



Aside from ALMA, other telescopes have been making progress in measuring star formation at radio, millimetre, and submillimetre wavelengths.

Locally, eMERLIN has been at the cutting edge of high-resolution interferometry.

The newly-upgraded JVLA as well as the SKA pathfinder telescopes (ASKAP and MeerKAT) are pushing to new sensitivity levels in the radio regime.



Credit: J. C. Rojas/ESO

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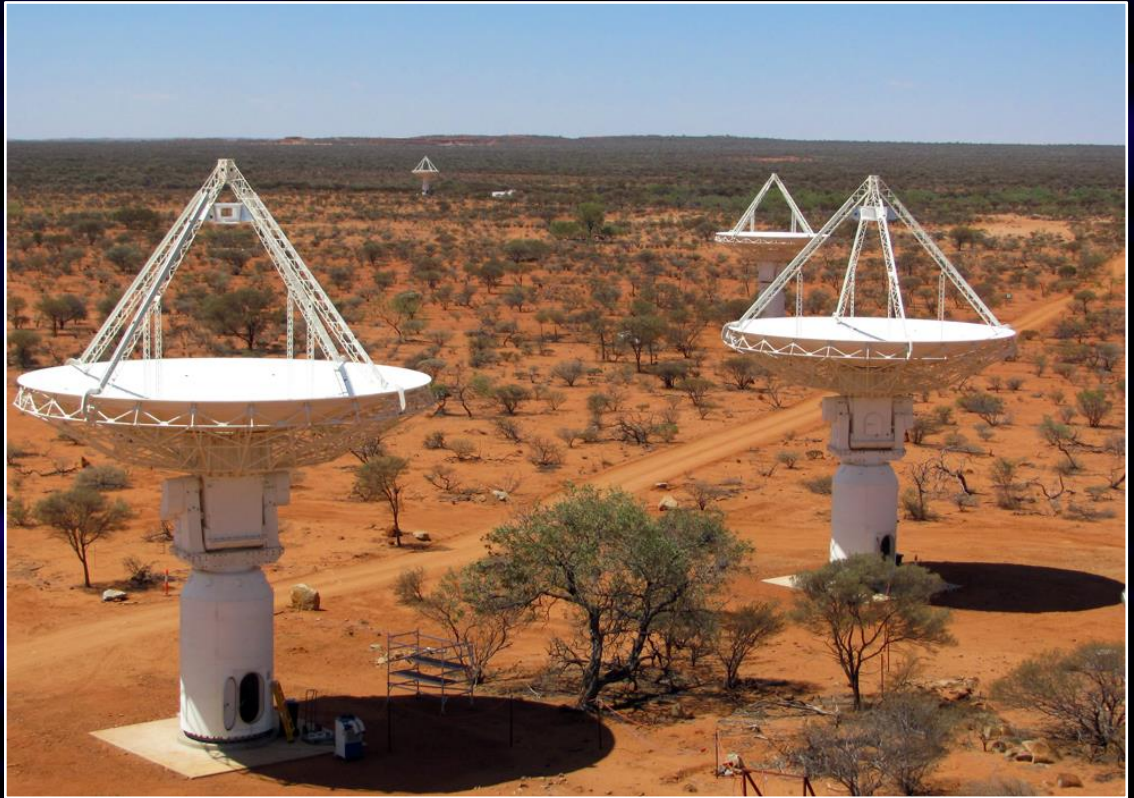


Credit: (NRAO/AUI/NSF)

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Credit: Ant Schinckel, CSIRO

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Credit: SKA South Africa

LOFAR is opening up science at low frequencies.

Of course, multiple other telescopes continue to contribute to this field of research (e.g. APEX, GBT, SMA) or will be in the near future (SKA).

I am looking forward to hearing about the research being done across this part of the electromagnetic spectrum.

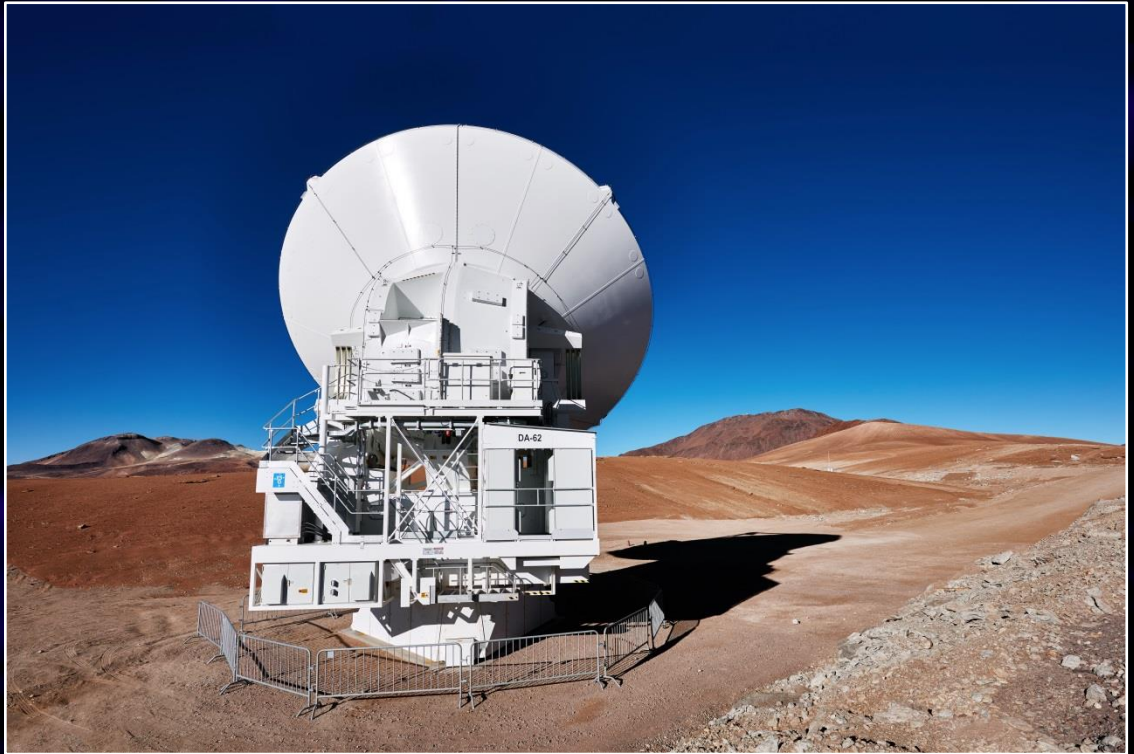


Credit: LOFAR/ASTRON

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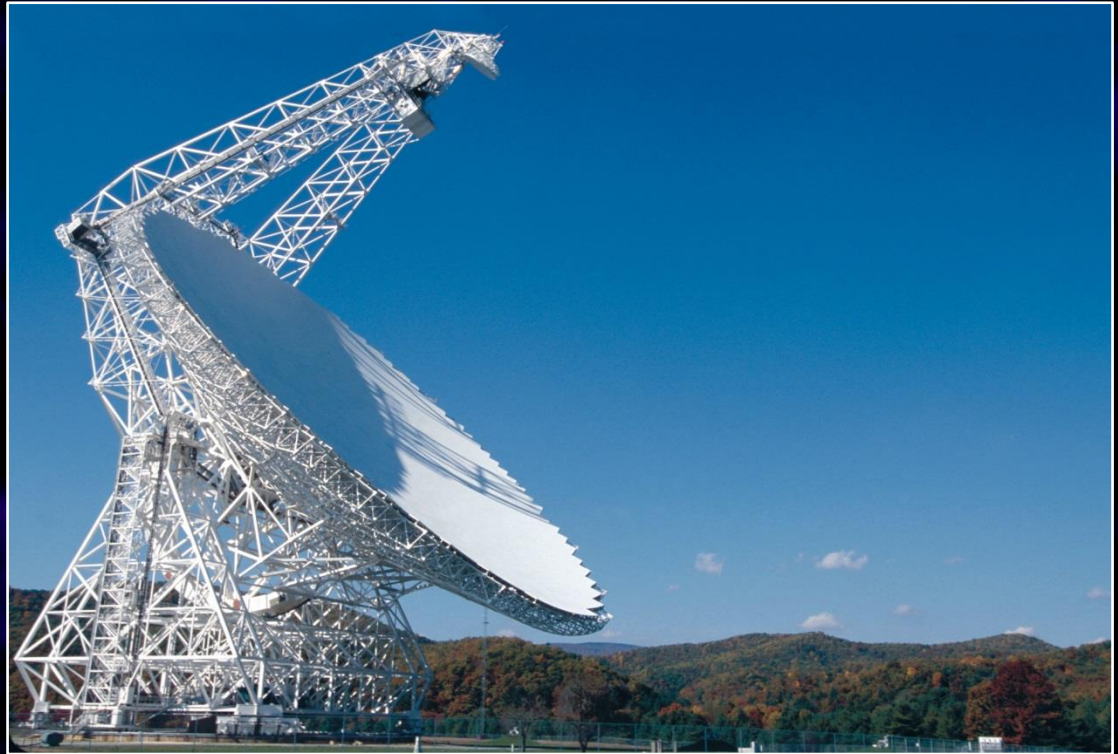


Credit: Enrico Sacchetti/ESO

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Credit: SKA Organisation