## SPARCS XIII: The Return of the Data

## Conference schedule

|  | COI                 | ilerence sched                                 | ute  |
|--|---------------------|--|--|
| All times in Austral                                     | lian Eastern Standa | ard Time (GMT+10)                              |  |
| All times in Australian Eastern Standard In-person talks |                     |  | Online talks   |
| Tuesday  |                     |  | 4 November 2025  |
| luesday  |                     |  | 4 Novelliber 2025  |
| Session 1  | Surveys 1           |  |  |
| 9:00-10:30   | 9:00-9:05           | Welcome by LOC                                 |  |
|  |                     | Tessa Vernstrom                                |  |
|  | 9:05-9:10           | Welcome by SOC                                 |  |
|  |                     | Kenda Knowles                                  |  |
|  | 9:10-9:40           | DSA2000  |  |
|  |                     | Vikram Ravi                                    | (invited)  |
|  | 9:40-10:10          | VLASS  |  |
|  |                     | Mark Lacy                                      | (invited)  |
|  | 10:10-10:30         | The deepest VLA radio extragalactic sky        | o continuum surveys in the   |
|  |                     | Eric F. Jiménez-Andrade                        | 2  |
| Break  | 10:30-11:00         |  |  |
|  |                     |  |  |
| Session 2  | Surveys 2           |  |  |
| 11:00-12:40  | 11:00-11:30         | EMU Overview                                   |  |
|  |                     | Tessa Vernstrom                                | (invited)  |
|  | 11:30-12:00         | Multiscale Magnetism                           | from Two Years of POSSUM   |
|  |                     | Craig Anderson                                 | (invited)  |
|  | 12:00-12:20         | <del>_</del>                                   | galactic All-sky MWA (GLEAM)   |
|  |                     | Stefan Duschense                               |  |
|  | 12:20-12:40         |  | actic All-sky Murchison Widefield<br>d (GLEAM-X) III: Galactic Plane |
|  |                     | Silvia Mantovanini                             |  |
| Lunch  | 12:40-14:00         |  |  |
|  |                     |  |  |
| Session 3  | Surveys 3           |  |  |
| 14:00-15:00  | 14:00-14:30         | LoTSS-HR: The high-re<br>LOFAR Two-Metre Sky   | solution post-processing of the variety                              |
|  |                     | Roland Timmerman                               | (invited)  |
|  | 14:30-15:00         | Commissioning SKA-Lo<br>towards Science Verifi | ow: first results and future plans<br>cation                         |
|  |                     | George Heald                                   | (invited)  |

Break

15:00-15:30

| Session 4        | Surveys 4   |  |         |
|------------------|-------------|--|---------|
| 15:30-17:00      | 15:30-16:00 | The MERGHERS Survey  |         |
|                  |             | -  | vited)  |
|                  | 16:00-16:30 | The MIGHTEE continuum survey   |         |
|                  |             | Imogen Whittam (in   | vited)  |
|                  | 16:30-16:50 | The MeerKAT+ S-band Legacy Survey  |         |
|                  |             | Shilpa Ranchod   |         |
|                  | 16:50-17:20 | Wide-field sub-arcsecond imaging at 50 MHz with the LOFAR Low-band Antenna                     |         |
| Poster Sparklers | 17:20-      | Henrik Edler (in   | ivited) |
| Wednesday        |             | 5 November 2   | 2025    |
|                  |             |  |         |
| Session 1        | Methods 1   |  |         |
| 9:00-10:20       | 9:00-9:20   | Beamforming strategies for surveys with SKA-Low  |         |
|                  |             | Danny Price  |         |
|                  | 9:20-9:40   | Radio Galaxy Zoo: Phase 1 Early Result   |         |
|                  |             | Hongming Tang  |         |
|                  | 9:40-10:00  | All Sky maps from m-mode Spherical Harmonic Tran Interferometry                                | sit     |
|                  |             | Jaiden Cook  |         |
|                  | 10:00-10:20 | Unveiling the Radio Universe with Machine Learning   | 9       |
|                  |             | Nikhel Gupta   |         |
| Break            | 10:40-11:10 |  |         |
|                  |             |  |         |
| Session 2        | Clusters 1  |  |         |
| 11:10-12:30      | 11:10-11:30 | Unveiling the detailed magnetic field structure of nearby galaxy clusters                      |         |
|                  |             | Erik Osinga  |         |
|                  | 11:30-11:50 | The Rise of Relic Statistics: What Radio Relics Can T<br>Us About Acceleration and Dark Matter | Teach   |
|                  |             | Wonki Lee  |         |
|                  | 11:50-12:10 | Exploring diffuse radio emission in galaxy groups us EMU & DINGO survey data                   | sing    |
|                  |             |  |         |

Lunch 12:30-14:00

Marco Balboni

New scaling relations for the galaxy cluster diffuse radio emission

Sai Wagh

12:10-12:30

| Session 3   | AGN 1            |   |
|-------------|------------------|---|
| 14:00-15:00 | 14:00-14:20      | Exploring Active Galactic Nuclei population in dust-obscured environments: Role of deep field radio continuum surveys         |
|             |                  | Veeresh Singh   |
|             | 14:20-14:40      | Searching for Giant Radio Galaxies (GRGs) for the MIGHTEE survey  |
|             |                  | Ndivhuwo Netshiavha   |
|             | 14:40-15:00      | Continuum imaging with uGMRT Band-2 (120-250MHz) in deep fields and characterization of diffuse emission: GAMA-23 and ELAISN1 |
|             |                  | Rashmi Sagar  |
| Break       | 15:00-15:30      |   |
|             |                  |   |
| Session 4   | Galactic And clu | sters   |
| 15:30-17:00 | 15:30-16:00      | Magnetism science with the MPIFR-MeerKAT Galactic Plane Survey  |
|             |                  | Yi ki Ma (invited)  |
|             | 16:00-16:20      | Continuum science with the MPIFR-MeerKAT Galactic Plane Survey  |
|             |                  | Jonah Wagenveld   |
|             | 16:20-16:40      | Galactic fields in the LOFAR Two-meter Sky Survey   |
|             |                  | Maria Arias   |
|             | 16:40-17:00      | The First High-Frequency (4-8 GHz) RM Grid through the Galactic Plane with GLOSTAR  |
|             |                  | Anahat Cheema   |
|             | 17:00-17:20      | On-the-Fly Mapping with MeerKLASS: Large-Scale and Interferometric Imaging in the UHF Band                                    |
|             |                  | Sourabh Paul  |
|             | 17:20-17:40      | Exploring the Non-Thermal Emission in Low-Mass Galaxy Clusters  |
|             |                  | Swarna Chatterjee   |
|             | 17:40-18:00      | From Group Dynamics to Cluster Halos: Galaxy Evolution in Groups and the Diffuse Skies in Clusters                            |
|             |                  | Konstantinos Kolokythas   |
| Thursday    |                  | 6 November 2025   |
| Session 1   | AGN 2            |   |
| 9:00-10:20  | 9:00-9:20        | New Evidence for Flaring Radio Sources as Producers of High Energy Neutrinos  |
|             |                  | Yjan Gordon   |
|             | 9:20-9:40        | The nature of HERGs and LERGs in LoTSS DR2 a morphological perspective  |
|             |                  | Jones Chilufya  |

**EMU and the DRAGNs** 

Ray Norris

9:40-10:00

| 10:00-10:20 | Echoes from the Edge: Finding High-Redshift AGN from Radio Surveys |
|-------------|--|
|             | Nick Seymour   |

| Break       | 10:40-11:10                           |  |  |
|-------------|---------------------------------------|--|--|
|             |                                       |  |  |
| Session 2   | Cosmology and Other types of galaxies |  |  |
| 11:10 12:30 | 11:10-11:30                           | Cosmology clustering systematics from source detection and population with continuum surveys   |  |
|             |                                       | David Parkinson  |  |
|             | 11:30-11:50                           | Magnetised Galactic Outflows in Dwarf Galaxies   |  |
|             |                                       | Sam Taziaux  |  |
|             | 11:50-12:10                           | Odd radio circles: what are they?  |  |
|             |                                       | Baerbel S. Koribalski  |  |
|             | 12:10-12:30                           | Unveiling Circularly Symmetric Diffuse Sources and Odd<br>Radio Circles in the SKA Era: A New Frontier in<br>Extragalactic Radio Astronomy |  |
|             |                                       | Shobha Kumari  |  |
| Lunch       | 12:30-14:00                           |  |  |
|             |                                       |  |  |
| Session 3   | Clusters 2                            |  |  |
| 14:00-15:00 | 14:00-14:20                           | Calibration Challenges and Cosmic Magnetism:<br>Low-frequency Polarization of Galaxy Cluster Merger<br>Shocks with uGMRT                   |  |
|             |                                       | Arpan Pal  |  |
|             | 14:20-14:40                           | Building catalogues of cluster diffuse radio emission sources with machine learning  |  |
|             |                                       | Chiara Stuardi   |  |
|             | 14:40-15:00                           | Building Toward the SKA: A Low-Frequency View of Galaxy Groups   |  |
|             |                                       | Ramananda Santra   |  |
| Break       | 15:00-15:30                           |  |  |
|             |                                       |  |  |
| Session 4   | AGN 3                                 |  |  |
| 15:30-17:00 | 15:30-15:50                           | The Jet Paths of Radio AGN and their Cluster Weather   |  |
|             |                                       | Eleni Vardoulaki   |  |
|             | 15:50-16:10                           | Spectral Ages of Remnant Radio Galaxies with SKA and Pathfinders   |  |
|             |                                       | Sushant Dutta  |  |
|             | 16:10-16:30                           | ApPolLo - Apertif counterparts of polarised LOFAR sources  |  |
|             |                                       | Anna Berger  |  |
|             | 16:30-16:50                           | A population-based approach to understandingradio AGN feedback with LOFAR  |  |
|             |                                       | Jonny Pierce   |  |

| 16:50-17:10 | Role of environment in the jet powering mechanism in radio quasars - insights from the LOFAR Two-metre Sky Survey (LoTSS) |
|-------------|---|
|             | Bohan Yue   |
| 17:10-17:30 | The radio structure of U/LIRGs along spatial scales   |
|             | Geferson Lucatelli ?  |
| 17:30-17:50 | Unveiling the Spectral Properties of Radio Halos in the Galaxy Clusters of the LOFAR sky survey                           |
|             | Koushika Sri Lakshmi Srikanth   |

| Friday      |             | 7 November 2025   |
|-------------|-------------|---|
| Session 1   | Misc        |   |
| 9:00-10:20  | 9:30-9:50   | Probing radio-quiet AGN feedback: Insights from ASKAP and GAMA              |
|             |             | Simone Candini  |
|             | 9:50-10:10  | Radio Detection of an M Dwarf Binary using e-MERLIN and the VLA             |
|             |             | Kelvin Wandia   |
|             | 10:10-10:30 | Attack of the Foregrounds: Taming the Milky Way with Gaussian Processes     |
|             |             | Jason Price   |
| Break       | 10:20-11:10 |   |
| Session 2   | AGN 4       |   |
| 11:10-12:30 | 11:10-11:30 | The study of extended radio galaxy in MERGHERS field                        |
|             |             | Banele Mthembu  |
|             | 11:30-11:50 | Synergistic Science with MeerKAT and Rubin LSST                             |
|             |             | Unnikrishnan Sureshkumar  |
|             | 11:50-12:10 | The LBA view of bright radio galaxies and their science with long baselines |
|             |             | Jort Boxelaar   |
|             | 12:10-      | Closing remarks   |
|             |             | SOC & LOC   |