

Sarrvesh Seethapuram Sridhar

Personal Information

Date of birth September 15, 1989 (28 years old)
Place of birth Chennai (India)
Citizenship Indian
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Education

2013–Present **Ph.D. Astronomy**,
University of Groningen, The Netherlands,
Thesis title: On magnetic fields in nearby galaxies.
Thesis advisors: Dr. George Heald and Prof. Dr. J.M. (Thijs) van der Hulst.
Expected finishing date: 31 October 2017.

2011–2013 **M.Sc. Physics and Astronomy**,
Chalmers University of Technology, Gothenburg, Sweden,
Thesis title: Modelling the Gravitationally Lensed Quasar PKS 1830-211.
Thesis advisors: Dr. Cathy Horellou and Dr. Sebastien Muller.

2006–2010 **Bachelor in Electronics and Communications Engineering**,
Panimalar Engineering College, Anna University, Chennai, India.

Internships & Research Visits

2016/17 **Extended research visit (6 months)**,
Commonwealth Scientific and Industrial Research Organisation (CSIRO), Perth, Australia.

Aug 2012 **Collisional Penrose Process Near Rotating Black Holes**,
Nicolaus Copernicus Astronomical Center (CAMK), Warsaw, Poland,
Advisor: Prof. Dr. Marek A. Abramowicz.

Sep 2012–
Dec 2012 **Redshift Space Distortion as a Cosmological Probe**,
Nicolaus Copernicus Astronomical Center (CAMK), Warsaw, Poland,
Advisor: Dr. Michał Chodorowski.

Schools & Workshops Attended

Oct 2016 **Publishing with Impact workshop 2016**,
CSIRO, Perth, Australia.

Nov 2014 **Third LOFAR Data Processing School 2014**,
ASTRON, The Netherlands.

Aug 2014 **Scientific Writing for Young Astronomers (SWYA 2014)**,
Course organized by Astronomy & Astrophysics.

Jul 2014 **Workshop on Galaxies and Cosmology**,
National Center for Radio Astrophysics (NCRA), Pune, India.

May 2014 **14th Synthesis Imaging Workshop**,
New Mexico Institute of Mining and Technology, Socorro, New Mexico.

- Jul 2013 **Galaxy Formation and Evolution in a Cosmological Context**,
Summer School at Laboratoire d'Astrophysique de Marseille (LAM), France.
- Jun 2013 **Summer School on "Molecules in Space"**,
Onsala Space Observatory, Sweden.
- Jun 2012 **Nordic Millimetre and Optical/NIR Astronomy Summer School 2012**,
Observational Cosmology and the Formation and Evolution of Galaxies,
Onsala Space Observatory, Onsala, Sweden.

Publications

13. **cuFFS: A GPU-accelerated code for Fast Faraday Rotation Measure Synthesis**, *Sridhar et al*, Submitted to Astronomy & Computing on April 18, 2018.
12. **Reliable detection and characterization of low-frequency polarized sources in the LOFAR M51 field**, *Neld et al*, Submitted to A&A on Oct 23, 2017.
11. **Investigation of the cosmic ray population and magnetic field strength in the halo of NGC 891**, *Mulcahy et al*, A&A, eprint arXiv:1804.00752.
10. **LOFAR MSSS: The scaling relation between AGN cavity power and radio luminosity at low radio frequencies**, *Kokotanekov et al*, A&A, eprint arXiv:1706.00225.
9. **What drives galactic magnetism?**, *Chyży, Sridhar et al*, A&A, eprint arXiv:1705.07187.
8. **Discovery of a 2.56 Mpc Giant Radio Galaxy associated with a disturbed galaxy group**, *Clarke et al*, A&A, eprint arXiv:1702.01571.
7. **The LOFAR Two-metre Sky Survey – I. Survey Description and Preliminary Data Release**, *Shimwell et al*, A&A, eprint arXiv:1611.02700.
6. **Faraday Tomography of the Local Interstellar Medium with LOFAR: I. Galactic Foregrounds Towards IC342**, *Van Eck et al*, A&A, eprint arXiv:1612.00710.
5. **LOFAR Facet Calibration**, *van Weeren et al (2016)*, ApJS, eprint arXiv:1601.05422.
4. **LOFAR, VLA, and Chandra Observations of the Toothbrush Galaxy Cluster**, *van Weeren et al (2016)*, ApJ, eprint arXiv:1601.06029.
3. **A plethora of diffuse steep spectrum radio sources in Abell 2034 revealed by LOFAR**, *Shimwell et al (2016)*, MNRAS, eprint arXiv:1603.06591.
2. **LOFAR 150 MHz observations of the Boötes field: Catalogue and Source Counts**, *Williams et al (2016)*, MNRAS, eprint arXiv:1605.01531.
1. **Diversity in extinction laws of Type Ia supernovae measured between 0.2 and 2 μm** , *Amanullah et al (2015)*, MNRAS, eprint arXiv:1504.02101.

Proceedings

- 2015 **Magnetic field on a wide range of scales in star-forming galaxies**,
George Heald, Anna Williams, Sarrvesh S. Sridhar,
Proceedings of the conference "The many facets of extragalactic radio surveys: towards new scientific challenges", PoS(EXTRA-RADSUR2015)011.

Conference Presentations

- June 2017 **Talk on low frequency observations of nearby dwarf galaxies**,
Conference "Nearby Galaxies at Low Frequencies - Processes and Probes",
Gothenburg, Sweden.
- Nov 2016 **Talk on low frequency observations of nearby galaxies**,
Conference "The First Pietro Baracchi Conference", Perth, Australia.

- June 2016 **Invited talk on Applying facet calibration to LOFAR data**,
Conference "Galactic and Extragalactic magnetic fields from data",
Bochum, Germany.
- June 2015 **Low frequency observations of the Pinwheel galaxy (M101)**,
Conference "LOFAR Science 2015", Assen, The Netherlands.
- Oct 2014 **Magnetic field structures in the Pinwheel galaxy (M101/NGC 5457)**,
Conference "Cosmic Magnetic Fields", Krakow, Poland.

Teaching Experience

- Oct 2017 **Seventh European Radio Interferometry School 2017**,
ASTRON, The Netherlands,
Assisted school participants with LOFAR calibration and imaging.
- Sep 2016 **Fourth LOFAR Data Processing School 2016**,
ASTRON, The Netherlands,
Assisted school participants with LOFAR calibration and imaging.
- Apr.–Jun. 2015 **Introduction to Programming and Computational Methods**,
Kapteyn Institute, The Netherlands,
Teaching assistant for a Bachelor's course.
- 2014/2015 **Statistical Signal Processing**,
Kapteyn Institute, The Netherlands,
Teaching assistant for a Master's course.
- Apr.–Jun. 2014 **Physics of Galaxies**,
Kapteyn Institute, The Netherlands,
Teaching assistant for a Bachelor's course.

Grants & Awards

- 2017 **Leids Kerkhoven-Bosscha Fonds (LKBF) travel grant**,
Awarded €800.00 to attend the Science at Low Frequencies IV conference in Sydney, Australia.
- 2017 **Leids Kerkhoven-Bosscha Fonds (LKBF) travel grant**,
Awarded €650.00 to visit CSIRO Astronomy and Space Science (CSIRO/CASS) in Perth, Australia.
- 2017 **Leids Kerkhoven-Bosscha Fonds (LKBF) travel grant**,
Awarded €400.00 to attend the conference on The Broad Impact of Low Frequency Observing in Bologna, Italy.
- 2016 **Leids Kerkhoven-Bosscha Fonds (LKBF) travel grant**,
Awarded €1400.00 to visit CSIRO Astronomy and Space Science (CSIRO/CASS) in Perth, Australia.
- 2015 **Leids Kerkhoven-Bosscha Fonds (LKBF) travel grant**,
Awarded €800.00 to attend the Cosmic Magnetic Fields meeting in Stockholm, Sweden.
- 2014 **Best Abstract Contest**,
One of the three abstracts chosen as part of the Best Abstract Contest at the Cosmic Magnetic Fields conference held in Krakow, Poland.
- 2014 **Leids Kerkhoven-Bosscha Fonds (LKBF) travel grant**,
Awarded €800.00 to attend the 14th Synthesis Imaging Workshop in New Mexico, USA.

Observing Experience

- VLA 23 hours as PI
- LOFAR 36 hours as PI and 77 hours as co-I

Westerbork 48 hours as PI
GMRT 40 hours as co-I

Collaborations

1. LOFAR Magnetism Key Science Project (MKSP)
2. LOFAR Survey Key Science Project (SKSP)
3. MeerKAT MIGHTEE-POL working group

Non-academic Work Experience

Dec 2010– **Software Engineer**,
Aug 2011 *HCL Technologies India Pvt. Ltd.*, Chennai, India.
Description Design and Development of the Graphical User Interface for Cisco's Wireless LAN Controller using C, emweb, and HTML.

Sep 2010– **Junior Visual Aid Specialist**,
Nov 2010 *Visual Graphics Computing Services (McKinsey & Company)*, Chennai, India.
Description Creating graphical presentations out of the managerial texts provided by clients.

Computer skills

OS Linux, Windows
Programming C/CUDA C, C++, Python, Docker
Tools LOFAR Calibration software, CASA, Miriad, AIPS/ParselTongue
Typography \LaTeX , Sphinx