AKSHAY SURESH

Space Sciences Building 518, 122 Sciences Drive, Cornell University, Ithaca NY 14853
https://akshaysuresh1.com 0000-0002-5389-7806 as3655@cornell.edu

EDUCATION

Ph. D. (Astronomy), Cornell University — *Jan 2020 – May 2022 (expected)*
MS (Astronomy), Cornell University — *Aug 2017 – Dec 2019*
BS–MS Dual Degree with Distinction, — *Aug 2012 – May 2017*
Indian Institute of Science Education and Research (IISER), Pune

RESEARCH EXPERIENCE

Graduate Research Assistant — *Aug 2017 – Present*
Cornell Center for Astrophysics and Planetary Science
Advisors: James M. Cordes and Shami Chatterjee
Ph.D. thesis: *Radio Transient Searches from Millisecond to Hour-long Timescales*

Masters Thesis Research — *May 2016 – Apr 2017*
National Centre for Radio Astrophysics (NCRA–TIFR), Pune
Advisor: Divya Oberoi
MS thesis: *Investigation of Small Scale Weak Solar Emissions at Low Radio Frequencies*

Undergraduate Summer Internships
DAAD−WISE internship at Max Planck Institute for Extraterrestrial Physics — *May – Jul 2015*
NIUS−Physics fellow at NCRA–TIFR, Pune — *May – Jul 2014*

AWARDS AND FELLOWSHIPS

Cranson and Edna B. Shelley Outstanding Teaching Assistant Award (Cornell Univ.) — *2019*
Institute Gold Medal (IISER Pune) — *2017*
Outstanding Student Paper Award in Space Physics and Aeronomy (AGU Fall Meeting) — *2016*
DAAD−WISE Summer Scholarship — *2015*
National Initiative on Undergraduate Sciences – Physics Fellowship — *2013*
Kendriya Vaigyanik Protsahan Yojana Fellowship — *2012 – 2017*

TEACHING EXPERIENCE

Head Teaching Assistant (Cornell University)
ASTRO 1101: From New Worlds to Black Holes — *Fall 2018*

Teaching Assistant (Cornell University)
ASTRO 1102: Our Solar System — *Spring 2018*
ASTRO 1101: From New Worlds to Black Holes — *Fall 2017*

REFEREED JOURNAL PUBLICATIONS

3. Suresh, A., Chatterjee, S., Cordes, J. M., Bastian, T. S. & Hallinan, G., *"Detection of 2—4 GHz Continuum Emission from ϵ Eridani"*, 2020 *ApJ* 904 138.

2. Suresh, A., & Cordes, J. M., *"Induced Polarization from Birefringent Pulse Splitting in Magneto-ionic Media"*, 2019 *ApJ* 870 29.

1. Suresh, A., Sharma, R., Oberoi, D., et al. (39 authors), *"Wavelet-based Characterization of Small-scale Solar Emission Features at Low Radio Frequencies"*, 2017 *ApJ* 843 19.

ACADEMIC PRESENTATIONS

Contributed Conference Talks

NANOGrav Fall Meeting *2019*
The Breakthrough Listen Galactic Center Survey using the Green Bank Telescope

Institute Seminars

NCRA-TIFR Seminar *2019*
Birefringent Pulse Splitting in Magnetoionic Media

UC Berkeley SETI Seminar *2018*
Propagation-induced Effects on Fast Radio Bursts and Extraterrestrial Intelligence Signals

Posters

35th Meeting of the Astronomical Society of India *2017*
Exploring the Spatial Distribution of Weak Non-thermal Energy Releases on the Solar Surface

American Geophysical Union Fall Meeting *2016*
Wavelet Based Characterization of Low Radio Frequency Solar Emissions

34th Meeting of the Astronomical Society of India *2016*
Statistical analysis of weak solar bursts seen with the Murchison Widefield Array

APPROVED TELESCOPE ALLOCATIONS (AS PI)

Very Large Array:
VLA/19A-283: Precise Localization of Flares from the ϵ Eri Exoplanetary System (12 hrs.)

Green Bank Telescope:
GBT/21A-332: A Pilot Search for Galactic Transients from VLASS-identified Sources (12 hrs.)
GBT/19A-407: A FLAG Survey of Virgo and Coma Clusters for Fast Radio Bursts (64 hrs.)

Arecibo telescope:
P3315: L-band Survey of M87 for Fast Radio Bursts (12 hrs.)

MENTORING EXPERIENCE

Supervised Ryan J. Hill & Ethan S. Bair (both Cornell undergrads) during Fall 2019 on "Radio Frequency Interference Classification using Convolutional Neural Networks."

MEMBER AFFILIATIONS AND COLLABORATIONS

Associate member, NANOGrav collaboration *2019 – Present*
Graduate student member, American Astronomical Society *2019 – Present*
Member, American Association for the Advancement of Science *2019 – Present*
Associate member, Murchison Widefield Array collaboration *2016 – 2018*
Student member, Astronomical Society of India *2016 – 2017*

TECHNICAL SKILLS

Computer Languages Python, C, C++, LaTeX, HTML
Astronomy Software PRESTO, CASA, DS9

PROFESSIONAL SERVICE

Journal Referee
Monthly Notices of the Royal Astronomical Society *Aug 2020 - Present*

OUTREACH

"Ask an Astronomer" team member at Cornell University *Aug 2017 - Present*
Answer astronomy-related questions submitted by the public on an online forum.

4H Career Explorations for high school students *2018*
Conducted lectures and demonstrations on blackbody radiation and spectral lines.

Museum in the Dark *2018*
Organized stargazing sessions as part of a Halloween-themed night-time event at a local museum.