Vishal Gajjar

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RESEARCH INTEREST Search for Intelligent life in the Universe; Pulsars; Magnetars; Fast Radio Burst; Radio Transients; Large-scale surveys; Machine Learning

RESEARCH POSITIONS

 $\begin{array}{l} \textbf{Academic Researcher} \ \operatorname{Breakthrough} \ \operatorname{Listen}, \ \operatorname{UC} \ \operatorname{Berkeley}, \ 2021-\operatorname{current} \\ \textbf{Post-doctoral Fellow} \ \operatorname{Breakthrough} \ \operatorname{Listen}, \ \operatorname{UC} \ \operatorname{Berkeley}, \ 2018-2020 \\ \end{array}$

Templeton post-doctoral fellow, Space Science Lab, UC Berkeley, 2016 – 2018 **West-light post-doctoral fellow**, Xinjiang Astronomical observatory, China, 2015 – 2016

EDUCATION

Doctor of Philosophy (Physics), TIFR, Mumbai, India, 2014 Master of Science (Physics Major), TIFR, Mumbai, India, 2009

Bachelor of Engineering (Electronics and Communication), S. S. Engineering College, Bhavangar University, Bhavangar, India, 2005

ACADEMIC SERVICES

Expert reviewer for multi-year National Research Grant, **National Science Center**, **Poland**, 2021

Panel Member of National Science Foundation (NSF) AST proposal review, Washington DC, USA, 2019

SOC member of Penn State University SETI symposium, Penn State University, PA, USA, 2022

SOC member for a special session, COSPAR 2020, Sydney, Australia, 2020

Reviewer for GMRT and ASTROSAT proposals

 $\bf Organizer$ of weekly SETI meeting at the Department of Astronomy, UC Berkeley, 2016-2019

Reviewer of numerous papers from ApJ, ApJ Letters, MNRAS, and Astrophysics and Space Science

 ${\bf SOC}$ member of the annual science day, GMRT, India, 2009-2011

 ${f SOC}$ member for the 13^{th} Young Astronomers meet, Physical Research Laboratory, Ahmadabad, India, 2010

Support Astronomer for the GMRT proposal on "Observations of M-draft stars", GMRT, India, 2009

FELLOWSHIPS

Templeton post-doctoral fellow, UC Berkeley, USA, 2016

AND AWARDS West-Light Funding, Chinese Academy of Science, Urumqi, China, 2014 IAU Grant to attend the General assembly in Beijing, China, 2012

Young Scientist Award at the URSI General Assembly, Istanbul, Turkey, 2014

Senior Research Fellowship at the NCRA (2009), India Junior Research Fellowship at the NCRA (2007-2009), India ASTRON summer school, Dwingeloo, Neatherlands, 2010

Best oral presentation at the $12^{t\bar{h}}$ Young Astronomers Meet, Bengaluru, India, 2009 Internship in Radio Astronomy at the NCRA, Pune, India, 2006 - 2008

Publications Record I am author and co-author of **95 publications** (40 refereed journals), with around 1600 citations and an **h-index of 21** including **five** publications in **Nature** and **Nature Astronomy**. A full list my publications can be found at NASA ADS

MEDIA

Press Conference

Panel member and speaker for a press conference on Peering Deeper Into the Lair of the Repeating Fast Radio Burst at the 231st American Astronomical Society meeting, Washington DC, USA, 2018.

Other Media activities

Interviewed by numerous TV, radio and print media (CBS, KRON4, BBC, CNET, space.com, Times of India, The Better India, Daily Californian and others) and appeared in around 60 media articles (National Geographic, Forbes, Newsweek, Huffpost, Telegraph, The guardian, New Scientist, Gizmodo, Smithsonian.com, The Independent and others).

SIONING

INSTRUMENTS Lead real-time multi-beam commensal transient detection system at FAST, China AND COMMIS- Lead the commissioning of high-time resolution and polarization capabilities for Breakthrough Listen digital instrument at the GBT, USA

> Lead transient detection pipeline development for BL program (SPANDAK) utilizing ML candidate verification

Co-lead the commissioning of BL digital hardware at e-MERLIN/JBO, UK

Lead for the full refurbishing and commissioning operation of 4-meter dish antenna for radio astronomy school, NCRA, Pune, India

Lead the commissioning of BL digital hardware at International LOFAR stations at Ireland and Sweden

OBSERVATION EXPERIENCE

More than 400 hours of combined observing experience with the Green Bank Telescope (USA), the Parkes radio telescopes (Australia), Sardinia Radio Telescope (Italy), and the Giant Meterwave Radio Telescope (India)

PI and Co-PI of 10 accepted observing proposals with the Giant Meterwave Radio Telescope (India)

PI and Co-PI of six accepted observing proposals with the Green Bank Radio Telescope (USA)

TEACHING

Current Graduate students

AND **MENTORING**

Owen Johnson, Trinity College, Dublin, Ireland, 2022 – current

Sand, Ketan, PhD Candidate, McGill University, Canada, 2021 - current

Suresh, Akshay, PhD Candidate, Cornell University, Ithica, NY, USA, 2021 - current Perez, Karen, PhD Candidate University of Columbia, USA, 2019 - current

Previous Graduate students

Zhang, Yunfan G., PhD Candidate UC Berkeley, USA, 2017-2018

Li, Shiyu, PhD Candidate, NAOC, China, 2017-2018

Niu, Chen-hui, PhD Candidate, CAS, China, 2017-2018

Wen, Zhi-Gong, Staff XAO, China, 2014-2016

Mentored undergraduate students: 20

Teaching Assistant for a course on 'Statistical techniques in data analysis' with Dr. Dipanjan Mitra and Prof. Bhal Chandra Joshi at the IISER Pune, 2011

Teaching Assistant for a course on 'Stellar Astrophysics' with Dr. Dipanjan Mitra at the NCRA-IUCAA Grad school, Pune, 2010

Lecturer on NCRA-IUCAA winter school, Pune, India, 2010

Lecturer on the 'Data analysis using MATLAB for the 4-meter dish antenna' in the NCRA-TIFR Radio Astronomy summer school, Pune, India 2009

Selected Invited talks and Departmental Colloquia

Guest lecturer NCRA-IUCAA Radio Astronomy Winter School, Pune, 2021 Colloquium at Penn State University, State College, PA, USA, November 2021 Colloquium at National Center for Radio Astrophysics, Pune, India. October 2021. Invited talk at the conference EHT and Galactic Center Pulsars, Paris Observatory, June 2020

Invited speaker at 235th American Astronomical Society, Hawaii, USA, January 2020.

Invited member at KISS Technosignatures Workshop, California Institute of Technology (Caltech), Pasadena, USA, March 2019.

Invited talk at the Xinjian Astronomical Observatory, Urumqi, China, November 2019.

Invited talk at the Kavli Institute for Theoretical Sciences, Beijing, November 2019. Colloquium at National Center for Radio Astrophysics, Pune, India. December 2018.

 ${\bf Colloquium}$ at National Center for Radio Astrophysics, Pune, India, December 2017.

Invited member at the Breakthrough Discuss symposium, USA, 2017-2021.

Invited talk at TIFR sponsored science popularization event, Mumbai, 2012

Invited talk at *A for Astronomy seminar series*, Western Regional Instrumentation Centre (WRIC), Mumbai, India, 2012

Invited seminar at the Department of Physics & Astronomy, University of Manchester, UK, 2012