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Employment

South African Astronomical Observatory (SAAO), Cape Town, South Africa, **Post-Doctoral Fellow**;
May, 2021 - present

Centre for Space Research, North-West University, Potchefstroom, South Africa, **Adjunct Senior Lecturer**;
December, 2020 - December 2023

Centre for Space Research, North-West University, Potchefstroom, South Africa, **Post-Doctoral Fellow**;
September, 2017 - August 2020

Tata Institute of Fundamental Research, Department of Astronomy and Astrophysics, Mumbai, India **Post-Doctoral Fellow**; October, 2014 – September, 2017

Physical Research Laboratory, Ahmedabad, India, Department of Astronomy and Astrophysics, **Post-Doctoral Fellow**;
October, 2013 – October, 2014

Education

Ph.D. in Astronomy & Astrophysics, titled "*Multi-wavelength Study of Variability in Blazars*", Physical Research Laboratory, Ahmedabad, India (Affil. to MLSU, Udaipur Rajasthan), 2014.

M. Sc. Physics, with Specialization in Quantum Optics and Non-linear Optics, University of Allahabad, India, 2008.

B.Sc. Physics with Mathematics, University of Allahabad, India, 2006

Grants, Fellowships, & Awards

CTA–Post-Doctoral Fellowship, co-funded by CSR-NWU, Potchefstroom and NRF, South Africa

Post-Doctoral fellowship, awarded by Tata Institute of Fundamental Research, India, during 2014–present

Post-Doctoral fellowship, awarded by Physical Research Laboratory, India, during 2013–2014

Senior Research Fellowship, awarded by Physical Research Laboratory, India, during 2010–2014

Junior Research Fellowship, awarded by Physical Research Laboratory, India, during 2008–2010

Life-member of Astronomical Society of India (Membership No. 2110)

Member of the High Energy Stereoscopic System (HESS) Collaboration (since October 2017)

Research

Research Interests: Active Galactic Nuclei, Physical processes behind high energy emission in blazars, X-Ray CCD Calibration, Seyfert galaxies, instrumentation related to X-ray and optical CCDs

Professional Activities

Reviewer for *Monthly Notices of Royal Society (MNRAS)* & *Astronomy and Astrophysics (A&A)*

Life Member, Astronomical Society of India, 2010–Present

PI and Co-Is of several proposals using *NuSTAR*, *AstroSAT*, *HCT*, *Chandra*, SAAO & SALT, ALMA, GMVA, RadioAstron
 Founder and President of "United Science Foundation", a registered national level society in India (Reg. No. AMB/10325/2020-21) to promote education, science and technology

Teaching

Teaching Assistance for 'Classical Mechanics' course for Honours students Semester-I (2018) at 'Center for Space Research, North-West University Potchefstroom, South Africa'

Teaching Assistance for Physics Laboratory course at IIT Gandhinagar, Semester-I (2012)

Miscellaneous

Programming Languages: Python, C++, L^AT_EX, R, IRAF, Shell, TCL

Developed a number of tools to perform various SXT calibrations, for example:

Events merger, Data quality report generator, Corner sources analyzer, Automated analysis and web up-loader etc.

Seminars, Conference Presentations and Laboratory visits

2021:

1. "Data Analysis Workshop - AstroSat", June, 22-25, 2021 as **Invited** resource person to lead SXT based sessions

2019:

1. Contributory talk entitled as "The disk-reflection spectroscopy of black-hole X-ray binaries using Swift, AstroSat and NuSTAR" during HEASA-2019 - held in Swakomund, Namibia, during August, 28-30
2. Colloquium at Department of Physics, IIT Bombay entitled "The particle accelerations in blazar jets, an observation perspective", on August 23 **[invited]**
3. Represented status update of my project on M87 during "HESS Collaboration meeting - held in Krakow during April, 14-18
4. Conducted the data analysis session on '*AstroSat-SXT*' & *XMM-Newton* and supervised a number of student projects during "COSPAR capacity building workshop" organized at IISER Mohali during March 09-20 **[invited]**
5. Conducted the data analysis session on '*AstroSat-SXT*' and supervised a number of student projects during ASW-2019 held at IIT Indore during February 03-09 **[invited]**

2018:

1. Attended international school of cosmic ray Astrophysics themed as "Antiparticle Physics: Yesterday, Today and Tomorrow" held during 1-7, August, 2018. I was given the 'best poster' award during school.
2. Represented '*AstroSat-SXT*' calibration status during IACHEC meeting, held in Rome during 09-13, April

2017:

1. **Invited** Talk During "*AstroSat* View of AGN Central Engines" at IUCAA, Pune India during December 18–21, represented one hour session for hands-on data analysis for SXT, on-board *AstroSat*
2. **Invited** Talk during RETCO-III at IIST Trivendrum, 5 June
3. SPSAS-HighAstro, Sao Paulo, Brazil, 21-31 May **[Invited]**
4. Discussions with Prof. A. P. Marscher and blazar group at Boston University, 10 April
5. Interactions on X-ray detectors with Dave Burrows (PI: Swift-XRT instrument) and lab visit at PennState University, USA, 06-08, April

6. Lunch talk on '*Blazars with AstroSAT*' at Stanford University, USA, 03 April
7. 'IACHEC-2017 meeting', UCLA, California, USA, 27-30, March
8. 'Wide Band Spectral and Timing Studies of Cosmic X-ray Sources', TIFR, Mumbai (13 January)
9. 'Annual Meetings of Department of Astronomy and Astrophysics', TIFR, Mumbai (16 January)

2016:

1. A & A Departmental Seminar at API, Amsterdam, Netherlands (22 September)
2. A & A Departmental Seminar at SRON, Utrecht, Netherlands (19 September)
3. IAU Symposium 324, 'Frontiers in Black Hole Astrophysics', Ljubljana, Slovenia (September)
4. 'XXXIV Astronomical Society of India (ASI) meeting 2016', Srinagar, India (10-13, May)
5. 'Jet Triggering Mechanisms in Black Hole Sources', TIFR, Mumbai (20-23, January)
6. 'DAA Annual Interaction Meeting (DAIM-2016)', TIFR, Mumbai (20-23, January)
7. 'Timing & Spectroscopy : Wideband X-Ray Astronomy', TIFR, Hyderabad (12-14, January)

2015:

1. 'XXXIV Astronomical Society of India (ASI) meeting 2015', NCRA, Pune, India (17-20, February)
2. '3rd Annual Conference on High Energy Astrophysics in Southern Africa', Johannesburg, South Africa (18-20, June)

2014:

1. 'Conference on Hard X-ray Astronomy: Astrosat and Beyond', Goa (24-26, September)
2. 'Invited Lecture on Black hole at SVNIT', Surat, Gujarat (26, February)

2012:

1. IAU GA Meeting 2012, Beijing, China
2. 'Black Hole Universe', Bamberg, Germany
3. Astronomy Colloquium, LSW, Heidelberg, Germany
4. Departmental Seminar, INAF, Milano, Italy