

CONTACT	<p>The Thanu Padmanabhan Center for Cosmology and Science Popularization, SGT University, Delhi- NCR - 122505 <i>Tel:</i> +91- 7259671750 <i>email:</i> <a href="mailto:aditiagarwal.phy@gmail.com">aditiagarwal.phy@gmail.com</a></p> <hr/>
PERSONAL	<p>Nationality: Indian Date of Birth: 20<sup>th</sup> April, 1989</p> <hr/>
POSITIONS HELD	<p>RESEARCH ASSOCIATE (POSTDOCTORAL FELLOW) at Raman Research Institute, Bangalore, India, <i>September 2019 – March 2023</i> VISITING SCIENTIST at Indian Institute of Astrophysics (IIA), Bangalore, India, <i>June 2019 – September 2019</i> POSTDOCTORATE holding National Post Doctoral Fellowship (NPDF) at Indian Institute of Astrophysics (IIA), Bangalore, India, <i>2017 – June 2019</i></p> <hr/>
EDUCATION	<p>PH.D. IN PHYSICS (SUB-TOPIC - ASTROPHYSICS:) from Aryabhata Research Institute of observational sciences (ARIES), Nainital, India <i>2012 – 2017</i> <i>Thesis Title: Multi-wavelength studies of blazars</i> <i>Supervisor: Dr. Alok C. Gupta</i></p> <p>MSc. in Physics: Specialization in Electronics and Astrophysics, Hansraj College, Delhi University, New Delhi – 7, 2009-2011 BSc.(Honours) in Physics, Hansraj College, Delhi University, New Delhi-7, 2006-2009</p> <hr/>
RESEARCH INTERESTS	<ul style="list-style-type: none"><li>• Multi-wavelength flux and spectral variability of Blazars on diverse timescales.</li><li>• Quasi-Periodic Oscillations (QPOs) in various classes of AGNs on diverse timescales.</li><li>• Multi-wavelength variability of various classes of luminous AGNs.</li><li>• Black hole mass and spin in the transient Universe.</li><li>• Ultra High Energy Cosmic Ray (UHECR) emitting AGNs.</li><li>• Application of machine learning to Astronomy.</li></ul> <hr/>
OBSERVATION EXPERIENCE	<p>Observation time for the following telescopes was allocated through their dedicated proposal submission system.</p> <ul style="list-style-type: none"><li>• 2-m aperture optical-infrared telescope, the Himalayan Chandra Telescope (HCT), IIA, India</li><li>• 1-m aperture optical telescope at Manora Peak, ARIES, India.</li><li>• Ritchey-Chretien Cassegrain 1.3-m diameter Devasthal Fast Optical, ARIES, India.</li><li>• 1-m and 1.3-m optical telescopes at VBO, Kavalur, India</li><li>• Giant Metrewave Radio Telescope (GMRT), NCRA, India.</li><li>• CASLEO (Argentina): Jorge Sahade 2.15 m telescope and Helen Sawyer Hogg 0.6 m telescope.</li><li>• Istanbul University, Turkey: 1.0 m Ritchey-Chretien telescope and 60 cm Ritchey-Chretien robotic telescope.</li></ul> <hr/>

## RESEARCH EXPERIENCE

Extensive multi-wavelength observing and data analysis experience. I also have expertise in archive data analysis of various ground and satellite-based observations as follows:

### Gamma-ray Astronomy -

- Data reduction and analysis of observations taken from Fermi Gamma-ray Space Telescope.

### X-ray Astronomy -

- Data reduction and analysis of observations taken from SWIFT, XMM-Newton, NuStar.

### Optical Astronomy -

- Extensive observations of Active Galactic Nuclei (AGNs) with 1-m and 3-m class telescopes
- Data reduction and analysis
- Proficient in using data reduction software and analysis tools: IRAF, DAOPHOT, IDL
- Archival data: SWIFT observations, Steward Observatory (SO) spectropolarimetric observations

### Near-Infrared Astronomy:

- Archival data: SMARTS consortium, SWIFT data sets
- Modeling the optical-NIR SEDs
- Developed 'PyONEER toolkit,' i.e., Python Optical & NEar infrarEd Reduction toolkit for fast and efficient data reduction.

### Radio Astronomy:

- Blazar observations from Giant Metre Radio Telescope (GMRT), Pune.
- Gained preliminary experience in handling data in Radio wavelengths using AIPS & CASA.

### Multi-wavelength Astronomy:

- Developed a piece-wise gaussian fit technique to analyze long-term light curves (LCs) of AGNs to study dynamical evolution, the inner sub-parsec structure, radiation mechanisms, and location of radiating regions.
- Developed a package of time series analysis which consists of the periodogram, Lomb-Scargle periodogram, structure-function, discrete correlation technique, multi-harmonic analysis of variance periodogram, and the wavelet analysis, which is being used to analyze AGN LCs to determine the PSD shape, presence of a quasi-periodic oscillation, times of existence, duration and number of cycles of the QPO, the evolution of the QPO during the observation duration
- Developed 'PyONEER toolkit,' i.e., Python Optical & NEar infrarEd Reduction toolkit for fast and efficient data reduction from any optical-NIR telescope
- Modeling multi-wavelength spectral energy distributions of AGNs using GAMERA to understand the emitting region, discriminate between various theoretical models and put tight constraints on those model parameters that are likely to change

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## REFEREEING

- Active referee for:  
International Journals: Monthly Notices of the Royal Astronomical Society (MNRAS), Astronomy & Astrophysics (A&A) and Astrophysical Journal (ApJ).  
Indian Journal: Journal of Astronomy and Astrophysics.  
Indian Telescope facilities: 2-m Himalayan Chandra Telescope (HCT) at the Indian Astronomical Observatory (IAO), Hanle, and 3.6m Devasthal Optical Telescope, Devasthal.

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- MENTORING/TEACHING**
- Mentoring Eslam Elhosseiny, PhD student at the National Research Institute of Astronomy and Geophysics (NRIAG), Cairo, Egypt, for his PhD thesis projects based on ‘Temporal and spectral study of blazars on diverse timescales’ under supervision of Ali Takey, Associate professor at NRIAG.
  - Mentored Reshma Manivannan, M.G.R college, Hosur, for her research projects on ‘Exploring UV properties of blazars using ASTROSAT’ under the supervision of Prof. C.S. Stalin (IIA). Later, she got selected for PhD program at Christ University. We are now working on two papers based on the results.
  - Mentored a group of students (Yugum Bharti; Vishi Aggarwal; Ashwani Pandey) for their internship/research projects on ‘The study of blazar properties using Multi-wavelength data’ carried out under the supervision of my Thesis advisor Dr. Alok Gupta, in ARIES, India, from 2015 – 2017.
  - Mentored Mr. Avik Kumar Das and Mr. Sandeep Kumar Mondal, Ph.D. students at RRI (under the supervision of Prof. Nayantara Gupta), in understanding computing concepts, basic algorithmic skills, practicing various multi-wavelength data analysis techniques, and developing/implementing interesting theoretical AGN models.
  - Mentored Ms. Ayushi Chippa, M.Sc student, University of Delhi, for her dissertation on ‘The Unification scheme of Active Galactic Nuclei (AGNs)’ under the supervision of Prof. T. R. Seshadri (DU). Now she is enrolled in the Ph.D. program at the Indian Institute of Astrophysics.
  - Mentored Ms. Simran Joharle, a B.Sc. student at the Fergusson College (Pune), in understanding the basics of AGNs useful for her ongoing project on the optical studies of BL Lacertae. She is now pursuing a Master’s thesis at the Max Planck Institute for Astronomy, and we have started working on a paper in collaboration.
  - Teaching assistant for optical data analysis in the ARIES Training School (ATSOA) during 2013 - 2015. I was also a member of the Local Organizing Committee (LOC) in ATSOA.
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- SCIENCE OUTREACH**
- Motivated teachers and kids from various schools in/around Delhi and Nainital, such as Kendriya Vidyalaya, St. Xavier’s, etc., to pursue career in Astronomy & Astrophysics.
  - Conducted Science exhibition and cultural events (2-3 days) in Kendriya Vidyalaya, Delhi branch in 2015.
  - Conducted night sky watching with a telescope at Chiguru Farm, Bilikal Forest, Karnataka, during 2017-2019.
  - Delivered several public lectures in schools and public events on various astronomy topics like ‘Origin of the universe,’ ‘Life of a star,’ ‘SpaceX,’ etc. (2013-2019).
  - Played an active role in the “ARIES Science Popularization and Outreach Program,” organizing various activities for night-sky observations for school children and the general public.
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FREQUENT  
COLLABORATORS

- Prof. Nayantara Gupta, RRI Bengaluru, India
  - Prof. G. C. Anupama, Prof. Arun Mangalam, Prof. C. S. Stalin, IIA Bengaluru, India.
  - Prof. Alok C. Gupta: ARIES, Nainital.
  - Prof. Paul J. Wiita: The College of New Jersey, USA
  - Prof. M. Böttcher: Center for Space Research, North-West University, South Africa
  - Prof. Staszek Zola: Astronomical Observatory, Krakow, Poland
  - Prof. Sergio A. Cellone, Prof. Ileana Andruchow, Prof. Luis Mammana, Dr. Lorena C. Zibecchi: CASLEO, San Juan, Argentina
  - Prof T. R. Seshadri: Department of Physics and Astrophysics, University of Delhi
  - Asst. Prof. B. Mihov, Dr. L. Slavcheva-Mihova: Institute of Astronomy and NAO, Sofia, Bulgaria
  - Asst. Prof. Aykut Özdönmez: Ataturk University, Turkey
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ACHIEVEMENTS

- Ongoing Indo-Turkey project titled "Investigation of frequency and time-dependent optical variability of BL Lac type blazars on diverse timescales" funded by the Scientific and Technological Research Council of Turkey (TÜBİTAK).
  - Awarded 3-year postdoctoral position at the Center for Theoretical Physics, Warsaw, Poland, with Prof. Bozena Czerny (did not accept, instead joined RRI as a postdoctoral fellow).
  - Awarded a travel grant of 1800 USD by TMT Early-Career Initiative (TECI), California, USA.
  - Awarded "young researcher" award during the Conference on 'Half a Century of Blazars and Beyond,' Torino, Italy, 11 June - 15 June 2018.
  - Awarded 2-year National Post Doctoral Fellowship by SERB, Govt. of India, in 2017.
  - Awarded 2-year Junior Research Fellowship in 2012 and a 3-year Senior Research Fellowship in 2014 by the Department of Science and Technology (DST).
  - Cleared BARC-2012.
  - Qualified GATE 2012 with percentile 94.27, rank-362, for admission to premier research institutes in India.
  - Selected school captain for session 2005-06.
  - Awarded the best editor for school magazine in class- XI.
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COMPUTER  
SKILLS

- Operating System: Linux, Windows
  - Astronomy Packages: IRAF, IDL, Astronomical Image Processing Software (AIPS), Fermi Science tools and FermiPy, HEASoft, NuSTARDAS
  - Plotting Tools: Supermongo, GNU PLOT, Matplotlib
  - Programming: MATLAB, AWK, *Mathematica*, Pascal, Fortran, C++, Python
  - Technical skills: Expertise in data reduction of various space-based telescopes such as ASTROSAT, XMM Newton, SWIFT XRT/UVOT, Fermi, NuSTAR, Good exposure to observing and functional aspect of the GMRT, Working knowledge of AIPS and CASA, Expertise in observations from ground-based 1m - 3m class optical/NIR telescopes, Expertise in writing observation proposals for above-mentioned instruments, Expertise in numerical modeling and simulation.
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TALKS,  
CONFERENCES  
&  
SCHOOLS

- Conference on seven years of Astrosat, Bangalore, India, 28-29 September 2022.
- 7th Heidelberg International Symposium on High-Energy Gamma-Ray Astronomy, Barcelona, Spain, 04 - 08 July 2022.
- Astro-floor one-Day workshop, Raman Research Institute, Bangalore, 04 May 2022.
- National Workshop Astrophysical jets and observational facilities National perspective, 05-09 April 2021 (Online).
- 4m International Liquid Mirror Telescope (ILMT) held via Zoom platform during 29, 30 June, and 01 July 2020.
- 37<sup>th</sup> Annual Meeting of the Astronomical Society of India (ASI), at Christ (Deemed to be University) at Bengaluru during 18 - 22 February.
- TMT Early-Career Workshop, Pasadena, California, USA, December 2-9, 2018.
- Neighbourhood Astronomy Meeting (NAM) – 2018: held at Indian Institute of Astrophysics, Bangalore, India
- Conference on ‘Half a Century of Blazars and Beyond,’ Torino, Italy, 11 June - 15 June 2018.
- Workshop on ‘Data Analysis & LAXPC Science,’ TIFR, India: 18 Jan - 21 Jan 2017
- Conference on ‘Wide Band Spectral and Timing Studies of Cosmic X-ray Sources,’ TIFR, India: January 10 - 13, 2017.
- 1<sup>st</sup> BINA workshop, ARIES, Nainital, India: 15 Nov - 18 Nov 2016.
- Blazars through Sharp Multi-Wavelength Eyes, Malaga, Spain: 30 May - 3 June 2016.
- Jet Triggering Mechanisms in Black Hole Sources at TIFR, Mumbai during Jan 20-23, 2016
- Cloudy Workshop at IUCAA, Pune during 21 – 26 September 2015.
- Radio Astronomy School-2015 (RAS-2015), at the National Centre for Radio Astrophysics (NCRA-TIFR), Pune, from Aug 31 - Sept 11, 2015.
- Meeting on ‘Recent Trends in the study of Compact Objects - Theory and Observation’ at ARIES, Nainital, in May 2015.
- 33<sup>rd</sup> meeting of the Astronomical Society Of India (ASI2015), at IUCAA, Pune, during Feb 2015.
- International workshop on Transients, at IUCAA, Pune, on 16th Feb 2015.
- National symposium on VHE GAMMA-RAY ASTRONOMY, at BARC, Mumbai, during Nov 2013.
- Conference on ACCRETION ONTO BLACK HOLES, at International Center, Goa, during Sept 2013.
- Aries Training School of Observational Astronomy (ATSOA) Aries Training School of Observational Astronomy (ATSOA).
- Talk on Discoveries in Astrophysics in 2010, organized at Department of Physics and Astrophysics, University of Delhi.
- National symposium: Indian physics and mega projects, DSK center for research and innovation in science education held in Miranda House, DU from 2<sup>nd</sup> Feb, 09 to 3<sup>rd</sup> Feb, 09. Here I learned about the frontiers of String theory.

ORAL/POSTER  
PRESENTATIONS

- Oral presentation at ARIES, Nainital in August 2013.
  - Oral presentation at ARIES, Nainital in July 2014.
  - Oral presentation at Department of Physics, Gorakhpur University in 2014.
  - Oral seminar at ARIES, Nainital in August 2014.
  - Poster presentation in ASI-2015, at IUCAA, Pune, during Feb 2015.
  - Poster presentation in RETCO-2015 at ARIES, Nainital, during May 2015.
  - Oral seminar at ARIES, Nainital in August 2015.
  - Oral presentation in Jet triggering workshop at TIFR, Mumbai, during Jan 20-23, 2016.
  - Oral presentation at Department of Physics, Gorakhpur University in 2016.
  - Poster presentation in JETS2016, Malaga, Spain, 30 May - 3 June 2016.
  - Poster & Oral presentation in 1<sup>st</sup> BINA workshop 2016, ARIES, India, 15 Nov - 18 Nov 2016.
  - Oral presentation in the Conference on Wide Band Spectral and Timing Studies of Cosmic X-ray Sources, TIFR, India: January 10 - 13, 2017.
  - Oral presentation in Blazars&Beyond, Torino, Italy, 11 June - 15 June 2018.
  - Poster presentation in TMT Early-Career Workshop, Pasadena, California, USA, during December 2-9, 2018.
  - Poster presentation in 37<sup>th</sup> Annual Meeting of the Astronomical Society of India (ASI), Christ (Deemed to be University), Bengaluru, 18 - 22 February.
  - Oral seminar at Raman Research Institute (RRI), Bangalore, 3rd June 2019.
  - Oral presentations in 'Very Sirius Meetings' (VSM) at the Astronomy and Astrophysics Division, Raman Research Institute, Bangalore.
  - Oral seminar in the Seminar Series of Astrophysics and Cosmology conducted by IRC, Delhi University, 15 June 2020.
  - Oral seminar in the Astro-floor one-Day workshop, Raman Research Institute, Bangalore, 04 May 2022.
  - Poster presentation in 7th Heidelberg International Symposium on High-Energy Gamma-Ray Astronomy, Barcelona, Spain, 04 - 08 July 2022.
  - Poster presentation during the Conference on seven years of Astrosat, Bangalore, India, 28-29 September 2022.
  - Oral seminar at the Centre for Cosmology and Science Popularization, SGT University, Gurgaon, India, 24 November 2022.
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PLACE: Bangalore  
DATE: May 29, 2023

ADITI AGARWAL

## LIST OF PUBLICATIONS

### REFEREED

1. **Agarwal, Aditi**  
*Classification of blazar candidates of unknown type in Fermi 4LAC by unanimous voting from multiple Machine Learning Algorithms, 2023, ApJ, 946, 109*
2. **A. Agarwal**; B. Mihov; V. Agrawal; S. Zola; Aykut Ozdonmez; Ergun Ege; L. Slavcheva-Mihova; D.E Reichart; D.B. Caton; and Avik Kumar Das  
*Analysis of the intra-night variability of BL Lacertae during its August 2020 flare, 2023, ApJS, 265, 51*
3. **Agarwal, Aditi**; Pandey, Ashwani, Ozdonmez, Aykut ; Ege, Ergun; Das, Avik; Karakulak, Volkan  
*Characterizing the optical nature of the blazar S5 1803+784 during its 2020 flare, 2022, ApJ, 933, 42*
4. Priya, Shruti; Prince, Raj; **Agarwal, Aditi**; Bose, Debanjan; Ozdonmez, Aykut; Ege, Ergun  
*Multi-wavelength temporal and spectral analysis of Blazar S5 1803+78, 2022, MNRAS, 513, 2239*
5. Singh, K. P.; Kushwaha, P.; Sinha, A.; Pal, Main; **Agarwal, A.**; Dewangan, G. C  
*Spectral States of OJ 287 blazar from Multiwavelength Observations with AstroSat, 2022, MNRAS, 509, 2696*
6. **Agarwal, Aditi**; Mihov, B. ; Andruchow, I. ; Cellone, Sergio A.; Anupama, G. C.; Agrawal, V.; Zola, S.; Özdönmez, Aykut ; Ege, Ergün  
*Optical flux and spectral characterization of the blazar PG 1553 + 113 based on the past 15 years of data, 2022, JApA, 43, 9*
7. Prince, Raj ; Raman, Gayathri ; Khatoon, Rukaiya ; **Agarwal, Aditi**; Varun ; Gupta, Nayantara ; Czerny, Bozena ; Majumdar, Pratik  
*A comprehensive study of 2019-2020 flare of OJ 287 using AstroSat, Swift, and NuStar, 2021, MNRAS, 508, 315*
8. Prince, Raj;**Agarwal, Aditi** Gupta, Nayantara; Majumdar, Pratik; Czerny, Bozena; Cellone, Sergio A.; Andruchow, I.  
*Multi-wavelength Analysis and Modeling of OJ 287 During 2017-2020, 2021, A&A, 654, 38*
9. **Agarwal, Aditi**; Rani, Priyanka; Prince, Raj; Stalin, C. S.; Anupama, G. C.; Agrawal, Vipul  
*A Possible Quasi-Periodic Oscillation in the X-ray Emission of 3C 120, Galaxies 2021, 9, 20.*
10. **Agarwal, Aditi**; Mihov, B.; Andruchow, I.; Cellone, S. A.; Anupama, G. C.; et al.;  
*Multi-band behavior of the TeV blazar PG 1553+113 in optical range on diverse timescales, 2021, A&A 645, A137*
11. **Agarwal, Aditi**; Mihov, B.; Andruchow, I.; Cellone, S. A.; Anupama, G. C.; et al.;  
*VizieR Online Data Catalog: BVRI light curves of PG 1553+ 113 (Agarwal+, 2021), J/A+ A/645/A137*

12. **Agarwal, Aditi**; Cellone, Sergio A.; Andruchow, Ileana; Mammana, Luis; Singh, Mridweeka; Anupama, G. C.; Mihov, B. et al.;  
*Multiband optical variability of 3C 279 on diverse time-scales, 2019, MNRAS, 488, 4093*
13. **Agarwal, Aditi**,  
*Multi-band optical variability studies of Blazar, 2018, Bulletin de la Societe Royale des Sciences de Liege, 87, 321*
14. Ghosal, B; Singh, K. K.; Yadav, K. K.; Tickoo, A. K.; et al. (including **Agarwal, Aditi**);  
*Search for very high energy gamma-ray emission from the peculiar radio galaxy IC 310 with TAC-TIC during 2012 to 2015, 2018, NewA, 60, 42*
15. Kushwaha, Pankaj; Gupta, Alok C.; Wiita, Paul J.; et al. (including **Agarwal, Aditi**);  
*Multiwavelength temporal and spectral variability of the blazar OJ 287 during and after the 2015 December flare: a major accretion disc contribution, 2018, MNRAS, 473, 1145*
16. Gupta, Alok C.; Mangalam, Arun; Wiita, Paul J.; Kushwaha, P.; et al. (including **Agarwal, Aditi**);  
*A peculiar multiwavelength flare in the blazar 3C454.3, 2017, MNRAS, 472, 788*
17. **Agarwal, Aditi**; Mohan, P.; Gupta, Alok C.; Mangalam, A.; Volvach, A. E.; Aller, M. F.; Aller, H. D.; Gu, M. F.; Lähteenmäki, A.; Tornikoski, M.; Volvach, L. N.,  
*Core shift effect in blazars, 2017, MNRAS, 469, 813*
18. Gupta, A. C.; **Agarwal, Aditi**; Mishra, A.; Gaur, H.; Wiita P. J.; Gu M. F.; et al.  
*Multiband optical variability of the blazar OJ 287 during its outbursts in 2015 – 2016, 2017, MNRAS, 465, 4423*
19. Gupta, A. C.; **Agarwal, Aditi**; Bhagwan, J.; Strigachev, A.; Bachev, R.; Semkov, E.; Gaur, H.; Damjanovic, G.; Vince, O.; Wiita, Paul J.;  
*Multi-band optical variability of three TeV Blazars on Diverse Timescales, 2016, MNRAS, 458, 1127*
20. **Agarwal, Aditi**; Gupta, A. C.; Bachev, R.; Strigachev, A.; Semkov, E.; Wiita, Paul J.; Fan, J. H.; Pandey, U. S.; Boeva, S.; Spassov, B.,  
*Multiband optical variability of the blazar S5 0716+714 in outburst state during 2014–2015, 2016, MNRAS, 455, 680*
21. Gaur, H.; Gupta, A. C.; Bachev, R.; Strigachev, A.; Semkov, E.; Wiita, P. J.; Volvach, A. E.; Gu, M. F.; **Agarwal, A.**; Agudo, I.; Aller, M. F.; Aller, H. D.; Kurtanidze, O. M.; Kurtanidze, S. O.; Lähteenmäki, A.; Peneva, S.; Nikolashvili, M. G.; Sigua, L. A.; Tornikoski, M.; Volvach, L. N. ;  
*Optical and radio variability of BL Lacertae, 2015, A&A, 582, A103*
22. Mohan, P.; **Agarwal, Aditi**; Mangalam, Arun; Gupta, A. C.; Wiita, Paul J.;  
*Frequency-dependent core shifts and parameter estimation for the blazar 3C 454.3, 2015, MNRAS, 452, 2004*



23. **Agarwal, Aditi**; Gupta, A. C. ; Bachev, R. ; Strigachev, A. ; Semkov, E. ; Wiita, Paul J.; Bottcher, M. ; Boeva, S. ; Gaur, H.; Gu, M. F.; Peneva, S.; Ibryamov, S.; and Pandey, U. S.,  
*Multiband optical–NIR variability of blazars on diverse time-scales, 2015, MNRAS, 451, 3882*
24. Hayashida, M.; Nalewajko, K.; Madejski, G. M.; Sikora, M.; et al. (including **Agarwal, Aditi**);  
*Rapid variability of blazar 3C 279 during flaring states in 2013-2014 with joint Fermi-LAT, NuSTAR, SWIFT, and ground-based multi-wavelength observations, 2015, ApJ, 807*
25. **Agarwal, Aditi**; Gupta, A. C.,  
*Multiband optical variability studies of BL Lacertae, 2015, MNRAS, 450, 541*
26. **Agarwal, Aditi**; Gupta, A. C.,  
*Optical–NIR variability of blazars on diverse timescales, 2015, ASI Conference Series for RETCO II, 12, 141*

#### CONFERENCE PROCEEDINGS

1. Kushwaha et al. 2021 (including **Agarwal, Aditi**),  
*AstroSat View of Blazar OJ 287: A complete evolutionary cycle of HBL Component from end-phase to disappearance and Re-emergence, 37th International Cosmic Ray Conference (ICRC 2021)*
2. **Agarwal, Aditi**,  
*Multiwavelength studies of Active Galactic Nuclei over diverse timescales, 2018, COSPAR, 42E, 33A*
3. **Agarwal, Aditi**,  
*Frequency dependent core shift effect in blazars, 2018, COSPAR, 42E, 32A*
4. **Agarwal, Aditi**,  
*Frequency-dependent core shifts and parameter estimation in Blazars, 2016, COSPAR, 41E, 38*

#### ATEL

1. R Prince, R Khatoon, **Aditi, Agarwal**,  
*Swift XRT/UVOT follow-up of the recent optical activity of blazar BL Lacertae (No. 14774)*
2. **Aditi, Agarwal**,  
*Optical follow-up observations of the blazar PG 1553+113 ( No. 12635)*
3. **Aditi, Agarwal**; Avinash Singh, Brajesh Kumar,  
*Multiband photometric observations of the flat spectrum radio quasar 4C 38.41 (No. 12034)*

#### SUBMITTED

1. **Agarwal, Aditi**; B. Mihov; Ileana Andruchow; Sergio A. Cellone; et al.  
*Multi-band optical flux and spectral variability of BL Lacertae on diverse timescales; Submitted to*

2. **Agarwal, Aditi**

*Blazar classification using deep learning on multifrequency light curves, Submitted to ApJ*

IN PREPARATION

1. **Agarwal, Aditi** et al.

*Flux and spectral variability studies of Active Galactic Nuclei from intraday to long timescales*

2. **Agarwal, Aditi** et al.

*PG1553+113 through multi-wavelength eyes*

3. **Agarwal, Aditi** et al.

*Optical variability of the peculiar TeV gamma-ray Active Galactic Nucleus IC 310*

4. **Agarwal, Aditi**; A. Shukla; G. C. Anupama; Nibedita, Kalita; M. Bottcher; Wiita, Paul J.,

*Multi-wavelength Spectral Energy Distribution of TeV blazars*