Ritaban Chatterjee

Personal Data

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Phone	(091) 801-744-7597
Institution	Presidency University, Kolkata
Date of Birth	September 21, 1980.
Nationality	Indian.
Gender	Male.
Category	General.
Whether differently abled	No.

Academic Qualification

2009	Ph.D. in Astrophysics, Boston University, Boston, Massachusetts, USA. Thesis : Multi-Wavelength Time Variability of Active Galactic Nuclei. Advisor : Prof. Alan P. Marscher. Cumulative GPA in graduate courses: 3.76/4.00.
2003	M.Sc. in Physics, Indian Institute of Technology, Kanpur, India. CPI: 7.4/10.0.
2001	B.Sc. in Physics (Major) with Mathematics and Chemistry, Presidency College, University of Calcutta, India. Total marks: 72.25%.

Work Experience

2013 June–Present	Assistant Professor, Department of Physics, Presidency University, India.
2012 May–2013 May	Post-Doctoral Research Associate, Department of Physics and Astronomy, University of Wyoming, USA.
2009 Sep–2012 Apr	Post-Doctoral Research Associate, Department of Astronomy, Yale University, USA.
2006–2009 Aug	Graduate Research Assistant, Department of Astronomy, Boston University, USA.
2003–2005	Graduate Teaching Fellow, Department of Astronomy, Boston University, USA.

Refereed Publications

18 refereed publications with an average citation of approximately 51 as of 2020 January [from the SAO/NASA Astrophysics Data System (ADS)]. h-index 13.

18. *"Physical Inference from the γ-ray, X-ray, and Optical Time Variability of a Large Sample of Fermi Blazars"*, Majumder, Anwesh; Mitra, Kaustav; **Chatterjee, Ritaban**; Urry, C. M.; Bailyn, C. D.; & Nandi, Prantik **2019, MNRAS, 490, 124-134.**

17. *"The Accretion Disk-Jet Connection in Blazars"*, Sagnick Mukherjee, Kaustav Mitra & **Ritaban Chatterjee**, **2019, MNRAS, 486, 1672-1680.**

16. *"Probing the Jets of Blazars Using the Temporal Symmetry of Their Multi-Wavelength Outbursts"*, Roy, Namrata; **Chatterjee, Ritaban**; Joshi, Manasvita; Ghosh, Aritra **2019, MNRAS, 482, 743-757.**

15. *"Possible Accretion Disk Origin of the Emission Variability of a Blazar Jet"*, **Chatterjee, Ritaban**; Roychowdhury, Agniva; Chandra, Sunil; Sinha, Atreyee **2018, ApJL, 859, L21-L26**

14. *"Magnetic Field Amplification and Flat Spectrum Radio Quasars"*, Chen, Xuhui; **Chatterjee, Ritaban**; Zhang, Haocheng; Pohl, Martin; Fossati, Giovanni; Boettcher, Markus; Bailyn, Charles D.; Bonning, Erin W.; Buxton, Michelle; Coppi, Paolo; Isler, Jedidah; Maraschi, Laura; Urry, Meg **2014, MNRAS, 441, 2188**

13. *"The Black Hole Binary V4641 Sagitarii: Activity in Quiescence"*, MacDonald, R. K. D.; Bailyn, C. D.; Buxton, M.; Cantrell, A. G.; **Chatterjee, Ritaban**; Kennedy-Shaffer, R.; Orosz, J. A.; Markwardt, C. B.; Swank, J. H. **2014, ApJ, 784, 2-20.**

12. *"The X-ray spectrum and spectral energy distribution of FIRST J155633.8+351758: a LoBAL quasar with a probable polar outflow"*, Berrington, Robert C.; Brotherton, Michael S.; Gallagher, Sarah C.; Ganguly, Rajib; Shang, Zhaohui; DiPompeo, Michael; **Chatterjee, Ritaban**; Lacy, Mark; Gregg, Michael D.; Hall, Patrick B.; Laurent-Muehleisen, S. A., **2013, MNRAS, 436, 3321-3330.**

11. *"A Time Resolved Study of the Broad Line Regin in Blazar 3C454.3"*, Isler, J. C.; Urry, C. M.; Coppi, P.; Bailyn, C. D.; **Chatterjee, Ritaban**; Fossati, G.; Bonning, E. W.; Maraschi, L.; Buxton, M. **2013, ApJ, 779, 100-109.**

10. *"Implications of the Anomalous Outburst in the Blazar PKS 0208-512"*, **Chatterjee, Ritaban**; Nalewajko, Krzysztof; Myers, Adam **2013, ApJ, 771, L25-L30.**

9. *"An Optical-Near-Infrared Outburst with No Accompanying Gamma-Rays in the Blazar PKS 0208-512"*, **Chatterjee, Ritaban**; Fossati, G.; Urry, C. M.; Bailyn, C. D.; Maraschi, L.; Buxton, M.; Bonning, E. W.; Isler, J.; Coppi, P. **2013, ApJ, 763, L11-L16.**

8. *"Jet Spectral Breaks in Black Hole X-Ray Binaries"*, Russell, David; Markoff, Sera; Casella, Piergiorgio; Cantrell, A. G.; **Chatterjee, Ritaban**; Fender, Robert; Gallo, Elena; Gandhi, Poshak; Homan, Jeroen; Maitra, Dipankar; Miller-Jones, James; O'Brien, Kieren; Shahbaz, Tariq **2013, MNRAS, 429, 815-832.**

7. *"SMARTS Optical and Infrared Monitoring of 12 Gamma-Ray bright Blazars"*, Bonning, E. W.; Urry, C. M.; Bailyn, C.; Buxton, M.; **Chatterjee, Ritaban**; Coppi, P.; Fossati, G.; Isler, J.; Maraschi, L. **2012, ApJ, 756, 13-28.**

6. *"Optical and Near Infrared Monitoring of the Black Hole X-Ray Binary GX 339-4 during 2002-2010"*, Buxton, Michelle M.; Bailyn, Charles D.; Capelo, Holly L.; **Chatterjee, Ritaban**; Dincer, Tolga; Kalemci, Emrah; Tomsick, John A. **2012, AJ, 143, 130-145.**

5. *"Similarity of the Optical-IR and Gamma-Ray Variability of Fermi Blazars"*, **Chatterjee, Ritaban**; Bailyn, C.; Bonning, E. W.; Buxton, M.; Coppi, P.; Fossati, G.; Isler, J.; Maraschi, L.; Urry, C. M. **2012, ApJ, 749, 191-204.**

4. *"Connection between the Accretion Disk and Jet in the Radio Galaxy 3C 111"*, **Chatterjee, Ritaban**; Marscher, Alan P.; Jorstad, Svetlana G.; Markowitz, Alex; Rivers, Elizabeth; Rothschild, Richard E.; McHardy, Ian M.; Aller, Margo F.; Aller, Hugh D.; Lähteenmäki, Anne; Tornikoski, Merja; Harrison, Brandon; Agudo, Iván; Gómez, José L.; Taylor, Brian W.; Gurwell, Mark **2011, ApJ, 734, 43-58.**

3. *"Flaring Behavior of the Quasar 3C 454.3 Across the Electromagnetic Spectrum"*, Jorstad, Svetlana G.; Marscher, Alan P.; Larionov, Valeri M.; Agudo, Iván; Smith, Paul S.; Gurwell, Mark; Lähteenmäki, Anne; Tornikoski, Merja; Markowitz, Alex; Arkharov, Arkadi A.; Blinov, Dmitry A.; **Chatterjee, Ritaban**; D'Arcangelo, Francesca D.; Falcone, Abe D.; Gómez, José L.; Hagen-Thorn, Vladimir A.; Jordan, Brendan; Kimeridze, Givi N.; Konstantinova, Tatiana S.; Kopatskaya, Evgenia N.; Kurtanidze, Omar; Larionova, Elena G.; Larionova, Liudmilla V.; McHardy, Ian M.; Melnichuk, Daria A.; Roca-Sogorb, Mar; Schmidt, Gary D.; Skiff, Brian; Taylor, Brian; Thum, Clemens; Troitsky, Ivan S.; Wiesemeyer, Helmut **2010, ApJ, 715, 362-384.**

2. *"Disk-jet Connection in the Radio Galaxy 3C 120"*, **Chatterjee, Ritaban**; Marscher, Alan P.; Jorstad, Svetlana G.; Olmstead, Alice R.; McHardy, Ian M.; Aller, Margo F.; Aller, Hugh D.; Lähteenmäki, Anne; Tornikoski, Merja; Hovatta, Talvikki; Marshall, Kevin; Miller, H. Richard; Ryle, Wesley T.; Chicka, Benjamin; Benker, A. J.; Bottorff, Mark C.; Brokofsky, David; Campbell, Jeffrey S.; Chonis, Taylor S.; Gaskell, C. Martin; Gaynullina, Evelina R.; Grankin, Konstantin N.; Hedrick, Cecelia H.; Ibrahimov, Mansur A.; Klimek, Elizabeth S.; Kruse, Amanda K.; Masatoshi, Shoji; Miller, Thomas R.; Pan, Hong-Jian; Petersen, Eric A.; Peterson, Bradley W.; Shen, Zhiqiang; Strel'nikov, Dmitriy V.; Tao, Jun; Watkins, Aaron E.; Wheeler, Kathleen **2009, ApJ, 704, 1689-1703.**

1. *"Correlated Multi-Waveband Variability in the Blazar 3C 279 from 1996 to 2007"*, **Chatterjee, Ritaban**; Jorstad, Svetlana G.; Marscher, Alan P.; Oh, Haruki; McHardy, Ian M.; Aller, Margo F.; Aller, Hugh D.; Balonek, Thomas J.; Miller, H. Richard; Ryle, Wesley T.; Tosti, Gino; Kurtanidze, Omar; Nikolashvili, Maria; Larionov, Valeri M.; Hagen-Thorn, Vladimir A. **2008, ApJ, 689, 79-94.**

Conference Proceedings

1. *"Correlated Multifrequency Variability in the Blazars 3C 279 and PKS 1510-089"*, **Chatterjee, R.**, Marscher, A. P., Jorstad, S. G., Aller, M. F., McHardy, I. M., **2006, Bulletin of the American Astronomical Society, 38, 904.**

2. *"X-ray Dips and Superluminal Ejections in the Radio Galaxy 3C 120"*, Olmstead, A., Marscher, A. P., Jorstad, S. G., **Chatterjee, R.,** Aller, M. F., **2008, Bulletin of the American Astronomical Society, 40, 218.**

3. *"Multi-Wavelength Time Variability of Active Galactic Nuclei"*, **Chatterjee, R.**, **2009, Bulletin of the American Astronomical Society, 41, 306.01.**

4. *"Comprehensive Multi-waveband Monitoring of Gamma-ray Bright Blazars"*, Marscher, A. P., Jorstad, S. G., Larionov, V. M., **Chatterjee, R.**, D'Arcangelo, F., Manne-Nicholas, E., Olmstead, A. R., McHardy, I. M., Agudo, I., Gomez, J. L., Aller, M. F., Hagen-Thorn, V. A., Gear, W. K., Porter, D., **2009, Bulletin of the American Astronomical Society, 41, 326.03.**

5. *"Multiwavelength observations of Fermi blazars"*, Wells Bonning, E., Bailyn, C., Buxton, M., **Chatterjee, Ritaban**, Coppi, P., Fossati, G., Isler, J., Maraschi, L., Urry, C. M., **2011, Bulletin of the American Astronomical Society, 42, 324.08.**

6. *"The Exceptional Flaring Activity Of The Blazar 3C 454.3"*, Wells Bonning, E., Bailyn, C., Buxton, M., **Chatterjee, Ritaban**, Coppi, P., Fossati, G., Isler, J., Maraschi, L., Urry, C., **2011, Bulletin of the American Astronomical Society, 43, 408.01.**

7. *"Similarity of Optical-IR and Gamma-Ray Variability Properties of Fermi Blazars"*, **Chatterjee, R.,** Bailyn, C., Bonning, E., Buxton, M., Coppi, P., Isler, J., Urry, C. M., **2011, American Astronomical Society Meeting Abstracts, 218, 327.02.**

8. *"SMARTS Optical Spectroscopy of 3C 454.3"*, Isler, J., Bailyn, C., Bonning, E., Buxton, M., **Chatterjee, Ritaban**, Coppi, P., Fossati, G., Maraschi, L., Scalzo, R., & Urry, C., **2011, American Astronomical Society Meeting Abstracts, 218, 408.08.**

9. *"The Contrasting Nature of Gamma-Ray/Optical Variability in the Blazar PKS 0208-512 During Successive Outbursts"*, **Chatterjee, Ritaban**; Fossati, G.; Urry, C. M.; Bailyn, C. D.; Maraschi, L.; Buxton, M.; Bonning, E. W.; Isler, J.; Coppi, P., **2012 Fermi Symposium proceedings - eConf C121028, arXiv: 1303.2095.**

10. *"Magnetic Field Amplification and Blazar Flares"*, Chen, Xuhui; **Chatterjee, Ritaban**; Fossati, Giovanni; Pohl, Martin **The Innermost Regions of Relativistic Jets and Their Magnetic Fields, Granada, Spain, Edited by José L. Gómez; EPJ Web of Conferences, Volume 61, id.05011, arXiv:1309.4180.**

Professional Recognition: Research Grants

2019	Co-I of BRNS (Department of Atomic Energy) Research Grant: 3 year, Rs. 31,17,000/- .
2019	PI of ISRO (Department of Space) Research Grant: 1 year, Rs. 6,50,000/- (may be extended for 3 or more years).
2015	PI of UGC BSR Research Start-Up Grant (2 years, Rs. 6,00,000/-).
2012	Co-I of Fermi Cycle 5 Guest Investigator Program titled "Detailed Modeling of Bright Fermi Blazar Flares" (PI: Paolo Coppi).
2009	PI of Fermi Cycle 2 Guest Investigator Program titled "Investigating the Location and Mechanism of High Energy Emission in the Jets of Blazars" (1 yr, $69,000).
2008	Co-I of the VLBA program BM256 titled "Probing Blazars through Multi-Waveband Variability of Flux, Polarization, and Structure".

Professional Recognition: Activities

2019 Jan-present	Member, AstroSat Science Working Group.
2019 Feb-present	Life member, Astronomical Society of India.
2019 Jan	Co-organizer, 2nd Amal Kumar Raychaudhury Memorial Lecture at Presidency University, Kolkata.

2019	Referee, Advances in Space Research, Journal of Astrophysics and Astronomy.
2018 Oct-present	Member, Working Group for Gender Equity (WGGE) of the Astronomical Society of India.
2018 June	Awarded 150 ks time on AstroSat to observe four blazars.
2018 May	External reader of the PhD thesis and external examiner in the PhD viva-voce of Ms. Gayathri Raman, RRI, Bengaluru, India.
2017 Dec	Co-organizer, Conference titled “Universe after the first 200 million years" at Presidency University, Kolkata.
2017 September	Awarded two nights on the Devasthal Optical Telescope at Nainital to observe the radio galaxy 3C 111 simultaneously with Astrosat.
2017 August	Awarded 50 ks time on AstroSat to observe the radio galaxy 3C 111.
2017–present	Reviewer for time allocation of AstroSat proposal.
2017 Jan	Co-organizer, Amal Kumar Raychaudhury Memorial Lecture at Presidency University, Kolkata.
2016 Dec	Co-organizer, Advanced School on Gravitational Waves at Presidency University, Kolkata.
2016 Sep	Awarded 100 ks time on AstroSat to observe the blazar Mrk 421.
2016 May	External expert, Interview committee for recruitment of Junior Research Fellow in ISRO-RESPOND research project.
2015 August	Reviewer, Giant Metre-Wave Radio Telescope (GMRT) Proposal.
2015 May	External reviewer, Proposal submitted to the Indo-French Centre for the Promotion of Advanced Research-CEFIPRA.
2011–present	Referee, Astronomical Journal, Astrophysical Journal, Astrophysical Journal Letters, Monthly Notices of the Royal Astronomical Society.
2010, 2012, 2015	Member, NASA proposal review panel.
2014 Summer - Present	IUCAA Associate, Inter University Centre for Astronomy and Astrophysics (IUCAA), Pune, India.
2014 August	Co-organizer, Topical Conference on Gravity and Cosmology - Eastern Region (TCGC-ER) at Presidency University.

2011 May	Co-organizer, New England Regional Quasar and AGN Meeting (NERQUAM) and New England Regional Accreting Binaries Annual Meeting (NERABAM) at Yale University.
2011 Feb–2012 April	Assistant queue manager for the 1.3 meter telescope operated by Small and Moderate Aperture Research Telescope System (SMARTS).
2011–2012	Full member, American Astronomical Society.
2006–2010	Junior member, American Astronomical Society.

Professional Recognition: Awards and Fellowships

2009	2-yr post-doctoral fellowship at MIT Kavli Institute for Astrophysics and Space Research (declined).
2003	Council of Scientific and Industrial Research (CSIR) fellowship through the National Eligibility Test (NET) conducted by University Grants Commission (UGC), Government of India.
2002	HRI summer research fellowship, Harish Chandra Research Institute, Allahabad, 2002. Project : Optical Image Processing and Photometry of Active Galactic Nuclei.
2001	Institute Merit-cum-Means Scholarship, Indian Institute of Technology, Kanpur, India.
1998	National scholarships for Higher Secondary Examinations, Government of India.
1996	National scholarships for Secondary Examinations, Government of India.

Professional Recognition: Invited and Contributed Presentations

2019 Sep	Invited talk titled "Emission Line Properties of Low-Luminosity Active Galactic Nuclei" at the national level conference titled **Saha Equation 100, Department of Physics, Calcutta University.**
2019 Apr	Invited talk titled "Probing the Time Variability of Blazars with *AstroSat*" at the **Recent Trends in the Study of Compact Objects (RETCO-IV), IUCAA, Pune, India.**
2019 Feb	Plenary talk titled "Detailed Time Variability Properties of Blazars Using *AstroSat*" at the **37th Meeting of the Astronomical Society of India, Christ (Deemed to be University), Bengaluru, India.**

2018 Oct | Invited talk titled “The Accretion Disk-Jet Connection in Blazars: A Theoretical Approach” at the **One Day Meeting on AGN Science, IIA, Bengaluru, India.**

2018 June | Two lectures on “Active Galactic Nuclei" at the **IUCAA Summer School.**

2017 December | Invited talk titled “Accretion Disk-Jet Connection in the Blazar Mrk 421" at the **AstroSat View of AGN Central Engines, IUCAA, Pune, India.**

2017 September | Invited talk titled “Characteristic Timescale in the X-Ray Variability of the Blazar Mrk 421" at the **Astrosat Science Meet, ISRO Headquarters, Bengaluru, India.**

2016 January | Invited talk titled “Accretion Disk-Jet Connection (or Lack Thereof) in Fermi Blazars” at the international conference on **Jet Triggering Mechanisms in Black Hole Sources, Tata Institute of Fundamental Research, Mumbai, India.**

2015 October | Invited talk titled “Nature of Multi-band Outbursts of Fermi Blazars” at the international conference on **Extragalactic Relativistic Jets: Cause and Effect, ICTS, Bangalore, India.**

2014 September | Invited talk titled “Multi-Wavelength Study of Successive Outbursts in the Blazar PKS 0208-512” at the topical conference on **Hard X-Ray Astronomy: Astrosat and Beyond, held at The International Centre, Goa.**

2014 August | Invited talk titled “AGN and X-Ray Binary Connections" at the **Introductory Workshop on Relativistic Astrophysics, organized by Department of Physics, Gauhati University and IUCAA, Pune.**

2014 March | Poster presentation titled “An Optical-Near IR Outburst with No Accompanying Gamma-Rays in the Blazar PKS 0208-512: Results from Spectral Energy Distribution Modeling, **Meeting of the Astronomical Society of India, Mohali, India.**

2013 December | Invited talk titled “Astrophysical Black Holes: Are They All the Same?” at the **Topical Conference on Gravity and Cosmology - Eastern Region (TCGC-ER) hosted by the Theory Division of Saha Institute of Nuclear Physics (SINP), Kolkata**

2013 May | Oral presentation on “Spectral Modeling of Successive Outbursts in the Blazar PKS 0208-512: Location, Mechanism and Other Implications" at the **Annual New England Regional Quasar/AGN Meeting, MIT Haystack Observatory, MA, USA.**

2012 November	Poster presentation on “An Optical-Near-Infrared Outburst with No Accompanying Gamma-Rays in the Blazar PKS 0208-512” at the **Fourth Fermi Gamma-Ray Space Telescope Symposium, Monterey, CA, USA.**
2012 June	Oral presentation on “Universality of Black Hole Accretion" at **IIT Kanpur and IIT Kharagpur, India**.
2012 May 24	Oral presentation on “The Contrasting Nature of Gamma-Ray/Optical Variability in the Blazar PKS 0208-512 During Successive Outbursts" at the **Annual New England Regional Quasar/AGN Meeting, MIT, Cambridge, MA, USA.**
2011 July - Aug	Oral presentation on “AGN/X-Ray Binary Connection" at **NCRA, Pune, India (July 25); IUCAA, Pune, India (July 26); TIFR, Mumbai, India (July 29); IIA, Bangalore, India (August 1); and IISc, Bangalore, India (August 2)**.
2011 July - Aug	Oral presentation on “Universality of Black Hole Accretion" at **IISER, Pune, India (July 22); IIT Bombay, Mumbai, India (July 28)**.
2011 May	Poster presentation on “Similarity of Optical-IR and Gamma-Ray Time Variability Properties of Fermi Blazars” at the **218th American Astronomical Society Meeting, Boston, MA, USA.**
2010 May	Oral presentation on “Accretion disk Jet Connection in the Radio Galaxies 3C 120 and 3C 111” at the **Annual New England Regional Quasar/AGN Meeting, Boston University, Boston, MA, USA.**
2009 November	Poster presentation on “Multi-Waveband Variability of Eight Blazars in the First Year of Observations with Fermi” at the **Second Fermi Gamma-Ray Space Telescope Symposium, Washington DC, USA.**
2009 February	Invited talk on “Multi-Wavelength Time Variability of Active Galactic Nuclei,” **MIT, Cambridge, MA, USA.**.
2009 January	Dissertation talk on “Multi-Wavelength Time Variability of Active Galactic Nuclei,” **213th American Astronomical Society Meeting, Long Beach, CA, USA.**
2008 December	Invited talk on “Multi-Wavelength Time Variability of Active Galactic Nuclei,” **Columbia University, New York, NY, USA.**
2008 July	Oral presentation on “X-ray dips and Superluminal Ejections in the Radio Galaxy 3C 120”, **“Radio Galaxies in the Chandra Era”, Chandra X-ray Center, Cambridge, MA, USA.**

2008 June	Invited talk on "Time Variability of Active Galactic Nuclei: Why, How and some recent results of the Blazar 3C 279", **IIA, Bangalore, and NCRA, Pune, India.**
2007 June	Invited talk on "Time Variability of Active Galactic Nuclei", **Saha Institute of Nuclear Physics, Calcutta, India.**
2007 January	Poster presentation on "Correlated Multi-Frequency Variability in the Blazars 3C 279 and PKS 1510-089", **209th American Astronomical Society Meeting, Seattle, WA, USA.**
2006 June	Participant, "Astro-statistics Summer School", **Pennsylvania State University, PA, USA.**

Teaching Experience

Courses taught since 2013 Fall	PhD Coursework: Professional Research Training (How to Give an Effective Research Talk), Numerical Methods and Computing.
	MSc 2nd Yr: Introduction to Astrophysics, Astrophysics Laboratory.
	MSc 1st Yr: Classical Mechanics, General Laboratory, Computational Physics (Fortran/C/Python based).
	BSc 3rd Yr (Major): Electrical and Solid State Laboratory, Computational Physics, Astrophysics & Cosmology Elective.
	BSc 2nd Yr (Major): Lagrangian Mechanics, Skill Enhancement Course titled "Computational and Statistical Methods."
	BSc 1st Yr (Major): Newtonian Mechanics, Newtonian Mechanics Lab, Mathematical Methods Lab (Python Based).
	BA/BSc 1st Yr (General Education curriculum): Space, Time and the Universe, Physics of Everyday Life.
2014 August	Lecture titled "Introduction to Active Galactic Nuclei" at the Introductory Workshop on Relativistic Astrophysics, organized by Department of Physics, Gauhati University and IUCAA, Pune.
2013 Nov-Dec	Invited guest lecturer for Introduction to Astrophysics (25 lectures) for MSc 2nd yr students at the University of Gaur Banga, Malda, WB, India.

2011 Spring	Guest-lecturer in the course “Accretion and Jets: Topics in High Energy Astrophysics (Astro 725)” at Yale University.
2003-2006	Teaching fellow for the course “Astronomy 102: Stars and Galaxies” at Boston University in five semesters. Responsibilities: Teaching the laboratory component and discussion sections with students.

Mentoring Experience: Graduate Level

2020 Jan-Now	Ms. Susmita Das (PhD thesis advisee).
2019 Aug-Now	Ms. Susmita Das (Junior Research Fellow in ISRO funded project titled “Physics of Jets from the Comprehensive Timing Analyses of X-Ray Variability of Blazars").
2015 Odd semester	Mr. Ajay Haldar (PhD coursework optional module research project titled “Modeling Stellar Structure").

Mentoring Experience: Bachelor’s and Master’s Level (Curricular Research)

2019-20	Mr. Sripan Mondal (Ongoing MSc thesis project titled “Characteristics of AGN Variability").
2019-20	Mr. Saugata Barat (Ongoing MSc thesis project titled “Multi-Wavelength Outbursts of Blazars").
2019-20	Mr. Sagnick Mukherjee (Ongoing MSc thesis project titled “Photometrically Variable Stars in the Andromeda Galaxy") jointly with Prof. Raja Guhathakurta, UCSC.
2019-20	Mr. Arijit Sar (Ongoing MSc thesis project titled “Warm Absorbers in Active Galactic Nuclei") jointly with Dr. Susmita Chakravorthy, IISc.
2019 Spring	Ms. Nabanita Das (BSc thesis project titled “X-Ray and Optical Variability of the Radio Galaxies 3C 111 and 3C 120").
2018-19	Mr. Akib Jabed (MSc thesis project titled “Studying the Physics of Blazars Using Their Optical-Infrared and Gamma-Ray Outbursts").
2018-19	Mr. Tathagata Saha (MSc thesis project titled “Connection Between the Corona and Accretion Process in Active Galactic Nuclei").
2018 Spring	Mr. Sagnick Mukherjee (BSc thesis project titled “Disk-Jet Connection in Blazars").
2018 Spring	Mr. Souradip Bhattacharya (BSc thesis project titled “Comptonization in Active Galactic Nuclei").

2018 Spring	Mr. Prasun Ranjan Das (BSc thesis project titled “Development of Some Higher Secondary and BSc 1st Yr level Physics Demonstrations and Experiments").
2018 Spring	Mr. Kaustav Mitra (MSc thesis project titled “Turbulence in Blazar Jets").
2018 Spring	Mr. Dhrubajyoti Sengupta (MSc thesis project titled “Broad Line Emission in Low-Luminosity Active Galactic Nuclei") jointly with Dr. Susmita Chakraborty, IISc.
2017 Spring	Mr. Anwesh Majumder (BSc thesis project titled “Spectral Energy Distribution of Quasars").
2017 Spring	Mr. Tathagata Saha (BSc thesis project titled “Accretion Disk-Corona Interaction in Active Galactic Nuclei").
2017 Spring	Ms. Sukanya Mallik (BSc thesis project titled “Particle Acceleration in the Universe (Reading Course)").
2017 Spring	Ms. Nishat Parveen (MSc thesis project titled “Thermal Emission from Blazars").
2017 Spring	Mr. Faruk Abdulla (MSc thesis project titled “Astrophysical Fluid Dynamics (Reading Course)").
2016 Spring	Mr. Agniva Roychowdury (BSc thesis project titled “Identification and Classification Quasars Using Their Vaiability").
2016 Spring	Mr. Shashwata Ganguly (BSc thesis project titled “Modeling X-ray and Optical Variability in Accertion Disk-Corona System in Active Galactic Nuclei").
2016 Spring	Ms. Namrata Roy (Co-Supervisor: MSc thesis project titled “Characteristics of Chromospheric Spectral Lines in Solar Flares").
2015 Spring	Ms. Jhuma Ghosh (MSc thesis project titled “Comparing the Nature of GeV Variability of FSRQ and BL Lac Objects Using Fermi-LAT Data").
2015 Spring	Mr. Pritam Pramanik (MSc thesis project titled “WISE Properties of Type-2 Quasars").
2014 Spring	Mr. Prantik Nandi (MSc thesis project titled “Probing Accretion Disk-Jet Connection Through Gamma-Ray Variability of Blazars").
2014 Spring	Mr. Somnath Mandal (MSc thesis project titled “Studying the Gamma-Ray vs. X-ray Time variability of Fermi Blazars").

2014 Spring	Mr. Suryasish Ghosh (MSc thesis project titled “Physics of Blazar Jets Using Gamma-Ray vs. Optical-Infrared Time Variability").

Mentoring Experience: Bachelor's and Master's Level (Extra-Curricular Research)

2019-20	Mr. Souradip Bhattacharya (Extra-curricular project titled “Non-Stationarity and Non-Linearity of Blazar Variability"), paper submitted to ApJ.
2016 Summer onward	Mr. Kaustav Mitra (BSc 3rd Yr) (Extra-curricular project titled “Turbulence in Blazar Jets").
2016 Spring onward	Mr. Anwesh Majumder (BSc 2nd Yr) (Extra-curricular project titled “Spectral Energy Distribution of Blazars").
2015 Summer - 2016 Summer	Mr. Sunip Kumar Mukherjee (BSc 3rd Yr) (Extra-curricular projects titled “Simulating Realistic Turbulent magnetic Field in a 3-dimensional Box", “Damped Random Walk Modeling of Quasar Variability,” and various other computational projects Using Python and C).
2015 Summer	Mr. Aritra Ghosh (BSc 3rd Yr) (Extra-curricular project titled “Reduction and Analysis of Fermi-LAT Gamma-Ray Data").
2015 Summer	Mr. Anwesh Majumder (Extra-curricular project titled “N-body Simulation and Application to Our Solar System").
2015 Summer	Mr. Alankar Dutta and Mr. Ranajay Dutta (BSc 2nd Yr) (Extra-curricular project titled “Detection of Extrasolar Planets by the Transit Method").
2014 Summer - 2016 Summer	Ms. Namrata Roy (MSc 1st-2nd Yr) (Extra-curricular project titled “Symmetry Properties of Gamma-Ray and Optical Outbursts in Fermi Blazars").
2014 Spring	Ms. Somdutta Ghosh (BSc extra-curricular project titled “Modeling the Emission Variability in Accertion Disks Around Black Holes").
2010-2011	Co-supervised final-year undergraduate student Laura Kreidberg in her senior thesis “Systematic Error in the Mass Distribution of Stellar-Mass Black Holes”

Placement of Project Students

Mr. Prantik Nandi	PhD student at S. N. Bose National Centre for Basic Sciences.
Ms. Jhuma Ghosh	PhD student at Saha Institute of Nuclear Physics.

Ms. Namrata Roy	PhD student at University of California, Santa Cruz, USA.
Mr. Sunip Kumar Mukherjee	PhD student at University of Massachusetts at Lowel.
Mr. Aritra Ghosh	MS student at University of Groningen, Netherlands (2015-17); PhD student at Yale University, New Haven, USA.
Mr. Shashawata Ganguly	MS (and later PhD) student at Bonn-Cologne Graduate School of Physics and Astronomy, Germany.
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