



Prof. Parijat Thakur

Designation: Professor

Department of Pure and Applied Physics

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EDUCATION

Degree	Institute/Board	Year
Ph.D.(Physics/Astrophysics)	Pt. Ravishankar Shukla University,Raipur (C.G.), 492010, India	2002
M.Sc. (Physics)	Pt. Ravishankar Shukla University,Raipur (C.G.), 492010, India	1995
B.Sc (Phy., Chem., Hr. Maths)	Pt. Ravishankar Shukla University,Raipur (C.G.), 492010, India	1993
H.S.S.C (Phy., Chem., Maths)	M.P. Board of Sec. Edu., Bhopal 462 011, India.	1990
H.S.C (Science)	M.P. Board of Sec. Edu., Bhopal 462 011, India.	1988

DETAILS OF PH.D. DEGREE

- **Date of Submission of the Ph.D. Thesis:** 26-04-2002
- **Date of Award :** 22-07-2002
- **Institution & University where Ph.D. degree has been awarded :** *IUCAA Reference Centre (IRCRSU), School of Studies in Physics and Astrophysics, Pt. Ravishankar Shukla University, Raipur (C.G.) 492 010, India.*
- **Title of the Ph.D. Thesis :** *A Study of Dynamical Modeling of Elliptical Galaxies.*
- **Name of the Supervisor :** Late Prof. D.K. Chakraborty¹², *Retired Professor, School of Studies in Physics and Astrophysics, Pt. Ravishankar Shukla University, Raipur (C.G.) 492 010, India.*

PROFESSIONAL EXPERIENCES

- **Professor** May27, 2022 to to-date
Dept. of Pure & Applied Physics Guru Ghasidas Vishwavidyalaya (A Central University), Bilaspur (C.G.), India.
- **Associate Professor** May20, 2011 to May 26, 2022
Dept. of Pure & Applied Physics Guru Ghasidas Vishwavidyalaya (A Central University), Bilaspur (C.G.), India.
- **Postdoctoral Fellow** April 1, 2006 to April 30, 2011
Dept. of Physics and Institute of Astronomy; National Tsing Hua Univ., Hsinchu, Taiwan
- **Postdoctoral Fellow** March 19, 2005 to July 31, 2006
Institute of Astronomy, National Central University; Pusan, South korea
- **Postdoctoral Fellow** Feb. 1, 2003 to March 18, 2005
Pusan National University Pusan, South korea
- **Postdoctoral Fellow & Adhoc Lecturer** Sept. 26, 2002 to Jan 31, 2003
Pt. Ravishankar Shukla University, Raipur (C.G.), India
- **Postdoctoral Fellow** April 27, 2002 to April 26, 2002
Pt. Ravishankar Shukla University, Raipur (C.G.), India
- **Research Fellow** Aug. 1, 2000 to April 26, 2002
Pt. Ravishankar Shukla University, Raipur (C.G.), India
- **Senior Research Fellow (SRF) CSIR, Nee Delhi** Jan. 24, 1998 to July 31, 2000
Pt. Ravishankar Shukla University, Raipur (C.G.), India
- **Research Fellow** July 1, 1996 to Jan. 23, 1998
Pt. Ravishankar Shukla University, Raipur (C.G.), India

RESEARCH EXPERIENCES

- **Total Professional Experience:** more than 26 Years, *which include nearly 20 Years of Research Experience after Ph.D.*
 - **Postdoctoral Experience:** 9 Years and 6 Days (Total) which include 8 Years and 3 Months (Abroad) and 9 Months and 6 Days (India).

¹who did Ph.D. under the supervision of Prof. A.R. Prasanna of Physical Research Laboratory (PRL), Navrangpura, Ahmedabad 380 009, India.

²who was also a Visiting Associate of IUCAA, Pune 411 007, India.

RESEARCH INTEREST

Astronomy & Astrophysics, Investigating Transiting Exoplanets, Exploring the Environment of the Black-hole and Neutron Star with the X-ray binaries, Galactic Structure and Dynamics, Galaxy Surface Photometry, Structure and Evolution of Barred Galaxies, NBODY PMSPH & TREESPH Simulations, Astronomical Image Processing.

JOURNAL REFEREEING

I have been appointed as an expert reviewer (referee) for the paper submitted to the Monthly Notices of the Royal Astronomical Society (MNRAS), which is renowned U.K. Journal of Astronomy and Astrophysics with Impact Factor of 5.249.

MEMBERSHIP/FELLOWSHIP OF THE PROFESSIONAL BODIES

- Life Member of International Astronomical Union (IAU), Paris, France.
- Life Member of Astronomical Society of India (ASI).
- Visiting Associate of Inter-university centre for Astronomy and Astrophysics (IUCAA), Pune, India.
- Associate of Committee on Space Research (COSPAR), France.
- Indian Society for Particle Accelerators (ISPA).

RESEARCH ASSOCIATESHIP

- Since August 2012, I have been continuing as a "Visiting Associate" of the Inter-university Centre for Astronomy and Astrophysics (IUCAA), Pune, India, which is an autonomous institution set up by the University Grants Commission (UGC), New Delhi to promote the teaching, research and development in Astronomy and Astrophysics at Guru Ghasidas Vishwavidyalaya (A Central University), Bilaspur (C.G.). As an associate of IUCAA, I can visit IUCAA to utilize the following facilities available there for the research in Astronomy and Astrophysics: (1) Advanced Computer Centre (2) Astronomical Data Centre, (3) PC-cluster for the High Performance Computing (4) Modern Library (5) 2-metre Optical Telescope Near Pune (6) Observational Facilities at Southern African Large Telescope (SALT) at Southernland (7) IUCAA-NCRA Radio Astronomy Lab. (8) Virtual Observatory (9) Mirror Sites. Moreover, under this programme, all the associates are encouraged to start collaborative research projects with the renowned astrophysicists working at IUCAA. For my each visit to IUCAA, I will be paid TA and DA with free lodging at IUCAA guest house. All these above mentioned facilities will also be given to the Ph.D. students registered under me at the Guru Ghasidas Vishwavidyalaya, Bilaspur (C.G.).
- Since July 2012, I has been continuing as an Associate of *Committee on Space Research (COSPAR), France*.

MAJOR RESEARCH PROJECT (COMPLETED: 04)

1. **Funding Agency:** Indian Space Research Organization (ISRO), Bangalore, India
 - **Title of the Project:** Exploring the Environment of the Black-hole with the X-ray binaries using the Archival Data of AstroSat
 - **Principal Investigator:** Prof. Parijat Thakur
 - **Project No.:** DS-2B-13013(2)/8/2019-Sec.2
 - **Grant Sanctioned:** ~ 19 lakhs
 - **Date of Commencement:** July 01, 2019
 - **Duration:** 3 years
2. **Funding Agency:** University Grant Commission (UGC), New Delhi, India
 - **Title of the Project:** Investigating Close-in Extra-solar Planets through Photometric Follow-up of their Transits
 - **Principal Investigator:** Prof. Parijat Thakur
 - **Project No.:** UGC-MRP 43-521/2014(SR)
 - **Grant Sanctioned:** 10.025 lakhs
 - **Date of Commencement:** June 30, 2015
 - **Duration:** 3 years
3. Funded by the National Science Council (NSC), Taipei, Taiwan, during the years 2005-2011, on the following research topics: (i) Light Curves of Transiting Exoplanets (ii) Formation of Nuclear Spiral in Barred Galaxies (iii) Structure and Dynamics of Triaxial Elliptical Galaxies.
4. Funded by Astrophysical Research Center for Structure and Evolution of the Cosmos (ARCSEC), which is supported by the Korea Science and Engineering Foundation (KOSEF), Seoul, South Korea, during the years 2003-2005, on the following topic: (i) SPH Simulations for Formation of Peculiar Nuclear Features in Barred Galaxies.

INTERNATIONAL FELLOWSHIP (09)

- A *postdoctoral fellowship (PDF)* from Dept. of Physics and Institute of Astronomy, National Tsing Hua University, **Hsinchu 30013, Taiwan**, which is funded by National Science Council (NSC), Taipei.
- A financial support from *National Science Council (NSC)*, Taipei, to attend the symposium on *Galactic Center - From the Center of the Milky Way to Nearby Low-Luminosity Galactic Nuclei*, held at *Physikzentrum Bad Honnef, Cologne, Germany*.
- A *postdoctoral fellowship (PDF)* from Institute of Astronomy, National Central University, **Chung-Li 320, Taiwan**, which is funded by National Science Council (NSC), Taipei.
- A partial financial support from *Institute for Advanced Studies, The Hebrew University, Jerusalem 91904, Israel*, to attend Winter School held there on *The Origin of Galaxies*.
- A partial financial support from *Astrophysical Research Center for Structure and Evolution of the Cosmos (ARCSEC)*, Seoul 143-747, South Korea, which is funded by Korea Science and Engineering Foundation (KOSEF), to attend Winter School on *The Origin of Galaxies*, held at *Institute for Advanced Studies, The Hebrew University, Jerusalem 91904, Israel*.
- A financial support from *Astrophysical Research Center for Structure and Evolution of the Cosmos (ARCSEC)*, Seoul 143-747, South Korea, which is funded by Korea Science and Engineering Foundation (KOSEF), for carrying out the optical observations of the barred galaxies using the remotely operated 2-m Himalayan Chandra Telescope (HCT) at *Indian Astronomical Observatory (IAO), Hanle, India*.
- A *postdoctoral fellowship (PDF)* from *Astrophysical Research Center for Structure and Evolution of the Cosmos (ARCSEC)*, Seoul 143-747, South Korea, which is funded by Korea Science and Engineering Foundation (KOSEF) (Completed).
- During April 2002, I got an offer of *postdoctoral fellowship (PDF)* from *School of Earth and Environmental Sciences, Seoul National University, Seoul 151-742, South Korea*, under **Brain Korea (BK21)** research program of Korea Ministry of Education (Decline due to personal reason).
- A partial financial support to attend *Summer Course on Mission Concept and Payload Design in X- and Gamma-Ray Astronomy, July 1-12, 2002 - CNR Conference Centre - held at Bologna, Italy* (Decline due to personal reason).

NATIONAL FELLOWSHIP (02)

- *Senior Research fellowship (SRF)* from *Council of Scientific and Industrial Research (CSIR)*, New Delhi 110 001, India.
- University Research Fellowship from Pt. Ravishankar Shukla University, Raipur (C.G.) 492 010, India.

RESEARCH COLLABORATION

- *Astrophysics Group, Keele University, Staffordshire, UK*.
- *Max Planck Institute for Astronomy, Königstuhl 17, D-69117 Heidelberg, Germany*.
- *Astronomical Institute, Slovak Academy of Sciences, SK-059 60 Tatranská Lomnica, Slovakia*.
- *Institute of Physics, Faculty of Science, Pavol Jozef Šafárik University, 040 01 Košice, Slovakia*.
- *Dept. of Physics and Institute of Astronomy, National Tsing-Hua University, Hsinchu, Taiwan*.
- *Institute of Computational and Modeling Science, National Tsing-Hua University, Hsinchu, Taiwan*.
- *Basic Science Research Institute, Pusan National University, Busan, South Korea*.
- *Department of Physics, Ben-Gurion University, Beer-Sheva 84105, Israel*.
- *National Astronomical Research Institute of Thailand (NARIT), Chiangmai, Thailand*.
- *Crimean Astrophysical Observatory, Nauchny, Crimea*.
- *Canakkale Onsekiz Mart University, Faculty of Sciences and Arts, Physics Department, 17100 Canakkale, Turkey*.
- *Inter-university centre for Astronomy and Astrophysics (IUCAA), Pune, India*.
- *U. R. Rao Satellite Center, ISRO, Bangalore, India*.
- *Indian Institute of Astrophysics (IIA), Bangalore, India*.
- *Aryabhata Research Institute of Observational Sciences (ARIES), Nainital, India*.

VISIT TO RESEARCH INSTITUTIONS IN INDIA

- Under the IUCAA Associateship programme, I have visited *the Inter-university Centre for Astronomy and Astrophysics (IUCAA), Pune, India* to attend the MHRD event titled "*Shodh Shiksha Sameeksha (SSS)*", held at IUCAA on October 01, 2017.
- Under the IUCAA Associateship Programme, I have visited *the Inter-university Centre for Astronomy and Astrophysics (IUCAA), Pune, India* from June 16, 2013 to June 30, 2013.
- In order to monitor the transiting extra-solar planetary systems, I have visited *Aryabhata Research Institute of Observational Sciences (ARIES), Nainital, India* from May 29, 2012 to June 4, 2012.

VISITED ABROAD

- **Cologne, Germany** → to attend symposium on *Galactic Center - From the Center of the Milky Way to Nearby Low-Luminosity Galactic Nuclei*.
- **Hsinchu/Chung-Li, Taiwan** → for joining as a postdoctoral fellow at *Institute of Astronomy, National Central University, Chung-Li 320, Taiwan*.
- **Jerusalem, Israel** → to attend Winter School on *The Origin of Galaxies* held at *Institute for Advanced Studies, The Hebrew University, Jerusalem 91904, Israel*.
- **Pusan, South Korea** → for joining as a postdoctoral fellow at *Pusan National University, Pusan 609-735, South Korea*.

AWARD OF PH.D. DEGREE UNDER THE SUPERVISION (01)

- **Name of Student:** Dr. Swadesh Chand^{3,4}
- **Title of Ph.D. Thesis:** *Exploring the Environment of Accreting Black Hole with X-ray Binaries*
- **Date of Submission of Ph.D. Thesis:** 27-12-2021
- **Date of Award of Ph.D. Degree:** 27-05-2022
- **Institution & University where Ph.D. Degree has been awarded:** Guru Ghasidas Vishwavidyalaya (A Central University), Bilaspur (C.G.), India

PH.D. THESIS SUBMITTED UNDER THE SUPERVISION (01)

- **Name of Student:** Mr. Vineet Kumar Mannaday⁵
- **Title of Ph.D. Thesis:** *Investigating Close-in Extra-solar Planetary Systems through Photometric Follow-up of their Transits*
- **Date of Submission of Ph.D. Thesis:** December 01, 2023
- **Institution & University:** Guru Ghasidas Vishwavidyalaya (A Central University), Bilaspur (C.G.), India

PH.D. STUDENTS SUPERVISING IN FIELD OF ASTROPHYSICS (03)

- Ms. Pragati sahu (Completed her Pre-Ph.D. Course work and the DRC for her Ph.D. Registration has already been conducted).
- Mr. Subhasish Das (Completed his Pre-Ph.D. Course work and the DRC for his Ph.D. Registration would be conducted soon).
- Ms. Shraddha Biswas (Completed her Pre-Ph.D. Course work and the DRC for her Ph.D. Registration would be conducted soon).

PG AND UG PROJECT SUPERVISED

On the topics based on the Astronomy and Astrophysics, I have supervised the projects to the following number of students of the Dept. of Pure & Applied Physics, Guru Ghasidas Vishwavidyalaya, Bilaspur (C.G.), India:

- **M.Sc. (Physics)** - 25
- **B.Sc. (Physics)** - 21

³worked as JRF and SRF in AstroSat, AO project awarded to Prof. Parijat Thakur by ISRO, Bangalore, India.

⁴currently working as a Postdoctoral fellow in the AstroSat Science Support Cell (ASSC), IUCAA, Pune, India.

⁵currently working as an Assistant Professor at Govt. Niranjan Kesharwani College, Kota, Bilaspur, Chhattishgarh.

LIST OF PUBLICATIONS

1. *Revisiting the Transit Timing Variations in the TrES-3 and Qatar-1 systems with TESS data*, Vineet Kumar Mannaday, **Parijat Thakur (Corresponding Author)**, John Southworth, Ing-Guey Jiang, D.K. Sahu, Luigi Mancini, M. Vanko, Emil Kundra, Pavol Gajdos, Napaporn A-Thano, Devesh P. Sariya, Li-Chin Yeh, Evgeny Griv, David Mkrtichian, Aleksey Shlyapnikov, 2022, *Astronomical Journal (AJ)*, arXiv:2209.04080, **inpress (WoS & SCOPUS Indexed Journal and Thomson Reuters Impact Factor: 6.263)**.
2. *AstroSat View of the Newly Discovered X-Ray Transient MAXI J1803-298 in the Hard-intermediate State*, Swadesh Chand, G.C. Dewangan, **Parijat Thakur (Corresponding Author)**, Prakash Tripathi, V.K. Agrawal, 2022, *Astrophysical Journal (ApJ)*, 933, 69 (**WoS & SCOPUS Indexed Journal and Thomson Reuters Impact Factor: 5.874**).
3. *Detection Of Low Frequency Quasi-Periodic Oscillation in Neutron Star X-ray Binary GX 17+2*, Subhasish Das, Pragati Sahu, and **Parijat Thakur (Corresponding Author)**, 2022, *Chhattisgarh Journal of Science and Technology (CJST)*, 19, 3 (**Impact Factor: 2.125**).
4. *The Transit Timing and Atmosphere of Hot Jupiter HAT-P-37b*, A-thano Napaporn; Ing-Guey Jiang, Awiphan Supachai, Rattanamala Ronnakrit, Su Li-Hsin, Hengpiya Torik, Sariya Devesh P., Yeh Li-Chin, Shlyapnikov A. A., Gorbachev Mark A., Rublevski Alexey N., Vineet Kumar Mannaday, **Parijat Thakur**, D. K. Sahu, Mkrtichian David, Griv Evgeny, 2021, *Astronomical Journal (AJ)*, 163, 77 (**WoS & SCOPUS Indexed Journal and Thomson Reuters Impact Factor: 6.263**).
5. *AstroSat Observation of 2016 Outburst of H 1743-322*, Swadesh Chand, V. K. Agrawal, G. C. Dewangan, Prakash Tripathi, and **Parijat Thakur (Corresponding Author)**, 2021, *Journal of Astrophysics and Astrophysics (JOAA)*, 42, 38 (**WoS & SCOPUS Indexed Journal and Thomson Reuters Impact Factor: 1.27**).
6. *Non-sinusoidal transit timing variations for the exoplanet HAT-P-12b*, Devesh P. Sariya, Ing-Guey Jiang, Li-Hsin Su, Li-Chin Yeh, Tze-En Chang V. V. Moskvina, A. A. Shlyapnikov, V. Ignatov, David Mkrtichian, Evgeny Griv, Vineet Kumar Mannaday, **Parijat Thakur**, D. K. Sahu, Swadesh Chand et al. 2021, *Research in Astronomy and Astrophysics (RAA)*, 21, 97 (**WoS & SCOPUS Indexed Journal and Thomson Reuters Impact Factor: 1.469**).
7. *Are There Transit Timing Variations for the Exoplanet Qatar-1b?*, Li-Hsin Su, Ing-Guey Jiang, Devesh P. Sariya, Chiao-Yu Lee, Li-Chin Yeh, Vineet Kumar Mannaday, **Parijat Thakur**, D. K. Sahu, Swadesh Chand et al. 2021, *Astronomical Journal (AJ)*, 161, 108 (**WoS & SCOPUS Indexed Journal and Thomson Reuters Impact Factor: 6.263**).
8. *Spectral analysis of a new black hole candidate AT2019wey using AstroSat/SXT*, Pragati Sahu, Subhashish Das, and **Parijat Thakur (Corresponding Author)**, 2021, *Chhattisgarh Journal of Science and Technology (CJST)*, 18, 152 (**Impact Factor: 2.125**).
9. *Probing Transit Timing Variation and its Possible Origin with Twelve New Transits of TrES-3b*, Vineet Kumar Mannaday, **Parijat Thakur (Corresponding Author)**, Ing-Guey Jiang, D.K. Sahu, Y.C. Joshi, A. K. Pandey, Santosh Joshi, Ram Kesh Yadav, Li-Hsin Su, Devesh P. Sariya, Li-Chin Yeh, Evgeny Griv, David Mkrtichian, Aleksey Shlyapnikov, Vasilii Moskvina, Vladimir Ignatov, M. Vanko, and C. Puskullu, 2020, *Astronomical Journal (AJ)*, 160, 47 (**WoS & SCOPUS Indexed Journal and Thomson Reuters Impact Factor: 6.263**).
10. *2016 outburst of H 1743-322: XMM-Newton and NuSTAR view*, Swadesh Chand, V.K. Agrawal, G.C. Dewangan, Prakash Tripathi, **Parijat Thakur (Corresponding Author)**, 2020, *Astrophysical Journal (ApJ)*, 893, 142 (**WoS & SCOPUS Indexed Journal and Thomson Reuters Impact Factor: 5.874**).
11. *No Indication for an Additional Planet in the Extra-solar Planetary System TrES-5*, Manish Sahu, Vineet Kumar Mannaday, and **Parijat Thakur (Corresponding Author)**, 2019, *Chhattisgarh Journal of Science and Technology (CJST)*, 16, 1 (**Impact Factor: 2.125**).
12. *Investigating Extra-solar Planetary System Qatar-1 through Transit Observations*, **Parijat Thakur (Corresponding Author)**, Vineet Kumar Mannaday, Ing-Guey Jiang, Devendra Kumar Sahu, Swadesh Chand, 2018, *Bulletin de la Societe Royale des Sciences de Liege (BSRSL)*, 87, 132 (**WoS & SCOPUS Indexed Journal and Thomson Reuters Impact Factor: 0.33**).
13. *Study of Transit Timing Variation in the hot-Jupiter System WASP-12*, Sanchayan Chatterjee, Vineet Kumar Mannaday, and **Parijat Thakur (Corresponding Author)**, 2018, *Chhattisgarh Journal of Science and Technology (CJST)*, 15, 7 (**Impact Factor: 2.125**).
14. *Transit Timing Variations Analysis of Extra-solar Planet Qatar-1b*, **Parijat Thakur (Corresponding Author)**, Vineet Kumar Mannaday, Ing-Guey Jiang, D.K. Sahu, Swadesh Chand, *International Journal of Luminescence and Applications (IJLA)*, 2017, 7, 527. (Peer Reviewed & Indexed Journal and Cosmos Impact Factor: 4.363).

15. *Comparative Study of JKTEBOP and TAP Codes for the Light Curve Analysis of the Extra-Solar Planetary Systems*, Vineet Kumar Mannada¹, **Parijat Thakur (Corresponding Author)**, Ing-Guey Jiang, D.K. Sahu and Swadesh Chand, International Journal of Luminescence and Applications (**IJLA**), 2017, 7, 530 (Peer Reviewed & Indexed Journal and Cosmos Impact Factor: 4.363).
16. *Structural Analysis by X-ray Diffraction*, M.P. Sharma, **Parijat Thakur**, and R. K. Pandey, International Journal of Mathematics and Physical Sciences Research (**IJMPSR**), 2015, 3(2), 13-16 (Peer Reviewed & Indexed Journal).
17. *Importance of Estimating Extinction Coefficients in Stellar Photometry*, Swadesh Chand, **Parijat Thakur (Corresponding Author)**, Abhijit Mandal, 2015, International Journal of Mathematics and Physical Sciences Research (**IJMPSR**), 3(1), 201- 204 (Peer Reviewed & Indexed Journal).
18. *Significance of Transformation Coefficients in Astronomical Photometry*, Swadesh Chand, **Parijat Thakur (Corresponding Author)** and M. P. Sharma, 2015, Journal of Pure Applied and Industrial Physics (**JPAP**) (An International Research Journal), 5(8), 250-255 (Peer Reviewed & Indexed Journal and Impact Factor: 2.07).
19. *A Comparative Study of Modern Theories of Universe*, Prateek Mayank and **Parijat Thakur (Corresponding Author)**, 2015, Journal of Pure Applied and Industrial Physics (**JPAP**) (An International Research Journal), 5(7), 223-230 Peer Reviewed & Indexed Journal and Impact Factor: 2.07).
20. *Possible Transit Timing Variations of the TrES-3 Planetary System*, Ing-Guey Jiang, Li-Chin Yeh, **Parijat Thakur**, Yu-Ting Wu, Ping Chien, Yi-Ling Lin, Hong-Yu Chen, Juei-Hwa Hu, Zhao Sun, and Jianghui Ji, 2013, Astronomical Journal (**AJ**), 145, 68 (**WoS & SCOPUS Indexed Journal and Thomson Reuters Impact Factor: 6.263**).
21. *Investigating Close-in Exoplanets through Transit Observation*, Ing-Guey Jiang, Li-Chin Yeh, **Parijat Thakur**, Ping Chien, Yi-Ling Lin, Yu-Ting Wu, Hong-Yu Chen, Zhao Sun and Jianghui Ji, 2013, International Astronomical Union Symposium (**IAUS**), (NARIT Conference Series), 1, 116 (**WoS & SCOPUS Indexed Journal and Thomson Reuters Impact Factor: 0.17**).
22. *Planet Destruction Rate of Occurrence and Observability: Has Planet Accretion Been Recently Found?*, Stuart F. Taylor, Ing-Guey Jiang, and **Parijat Thakur**, 2011, ESS, 2, 3607.
23. *Effect of Central mass Concentration on the Formations of Nuclear Spirals in Barred Galaxies*, **Parijat Thakur**, H.B. Ann and Ing-Guey Jiang, 2009, Astrophysical Journal (ApJ), 693, 586 (**WoS & SCOPUS Indexed Journal and Thomson Reuters Impact Factor: 5.874**).
24. *Self-consistent Triaxial de Zeeuw-Carollo Models*, **Parijat Thakur (Corresponding Author)**, Ing-Guey Jiang, Mousumi Das, D.K. Chakraborty and H.B. Ann, 2007, Astronomy and Astrophysics (**A&A**), 475, 821 (**WoS & SCOPUS Indexed Journal and Thomson Reuters Impact Factor: 5.802**).
25. *Formation of Nuclear Spirals in Barred Galaxies*, H.B. Ann and **Parijat Thakur**, 2005, Astrophysical Journal (**ApJ**), 620, 197 (**WoS & SCOPUS Indexed Journal and Thomson Reuters Impact Factor: 5.874**).
26. *A family of triaxial modified Hubble mass models: effects of the additional radial functions*, Mousumi Das, **Parijat Thakur (Corresponding Author)** and H.B. Ann, 2005, New Astronomy (**NewA**), 10, 271 (**WoS & SCOPUS Indexed Journal and Thomson Reuters Impact Factor: 1.325**).
27. *Nuclear Spirals and Supermassive Black Holes*, H.B. Ann and **Parijat Thakur**, 2004, International Astronomical Union Symposium (**IAUS**), 220, 315 (**WoS & SCOPUS Indexed Journal and Thomson Reuters Impact Factor: 0.17**).
28. *Correlated projected properties of some triaxial mass models : implications for their intrinsic shapes*, **Parijat Thakur** and D.K. Chakraborty, 2001, Monthly Notices of the Royal Astronomical Society (**MNRAS**), 328, 330 (**WoS & SCOPUS Indexed Journal and Thomson Reuters Impact Factor: 5.287**).
29. *Correlated projected properties of triaxial mass models*, **Parijat Thakur** and D.K. Chakraborty, 2001, The Bulletin of the Astronomical Society of India (**BASI**), 29, 443 (**WoS & SCOPUS Indexed Journal and Thomson Reuters Impact Factor: 0.704**).
30. *Intrinsic shape of elliptical galaxy NGC 661* , D.K. Chakraborty, Mousumi Das and **Parijat Thakur**, 2001, International Astronomical Union (**IAUS**), 205, 178 (**WoS & SCOPUS Indexed Journal and Thomson Reuters Impact Factor: 0.17**).
31. *Projected properties of triaxial modified Hubble mass models*, D.K. Chakraborty and **Parijat Thakur (Corresponding Author)**, 2000, Monthly Notices of the Royal Astronomical Society (**MNRAS**), 318, 1273 (**WoS & SCOPUS Indexed Journal and Thomson Reuters Impact Factor: 5.287**).
32. *Dynamical modeling of elliptical galaxy NGC 2513*, **Parijat Thakur**, Sahu D.K. and Chakraborty D.K., 1999, The Bulletin of the Astronomical Society of India (**BASI**), 27, 277 (**WoS & SCOPUS Indexed Journal and Thomson Reuters Impact Factor: 0.704**).

INVITED/SEMINAR/COLLOQUIUM TALK

1. I delivered an Invited talk entitled "*Transit Timing Variation Study of Extra-solar Planets: TrES-3b and Qatar-1b through follow-up of Their Transits using the 2-m HCT, Hanle, India*" on "**HCT20 Science Meeting**", held at the **Indian Institute of Astrophysics (IIA), Bangalore, India** during September 29-30, 2020.
2. I have delivered an Invited talk entitled "*Exploring Close-in Extra-solar Planets through Photometric Follow-up Observations of their Transits using Ground Based Telescopes*" on "**International Symposium on Extra-solar Planets**" held at the **Indian Institute of Astrophysics (IIA), Bangalore, India**, February 7-9, 2019.
3. I have delivered an Invited talk entitled "*Transit Timing Variations Analysis of Extra-solar Planet Qatar-1b*", on "National Conference on Signal Processing, Sustainable Energy Materials and Astronomy and Astrophysics (NSSEMA -2017)" held at Pt. Ravishankar Shukla University, Raipur, March 28 - 30, 2017.
4. I have delivered an invited talk entitled "*Accretion in X-ray Binaries*" at IUCAA Resource Centre (IRC) Seminar organized by *Inter-University Centre for Astronomy and Astrophysics (IUCAA) Resource Centre (IRC), S.o.S in Physics and Astrophysics, Pt. R.S. University, Raipur (C.G.), India*, May 02, 2015.
5. I have delivered an invited talk entitled "*Study of Exoplanet using Ground Based Telescope Facilities*" at IUCAA Resource Centre (IRC) Seminar organized by *Inter-University Centre for Astronomy and Astrophysics (IUCAA) Resource Centre (IRC), S.o.S in Physics and Astrophysics, Pt. R.S. University, Raipur (C.G.), India*, July 03, 2014.
6. I have delivered a seminar entitled "*Possible Transit Timing Variations of the TrES-3 Extra-solar Planetary System*" at the *Inter-University Centre for Astronomy and Astrophysics (IUCAA), Pune, India*, on June 25, 2013.
7. I have delivered an invited talk entitled "*AGN fueling in Barred Spiral Galaxies*" at IUCAA Resource Centre (IRC) Seminar organized by *Inter-University Centre for Astronomy and Astrophysics (IUCAA) Resource Centre (IRC), S.o.S in Physics and Astrophysics, Pt. R.S. University, Raipur (C.G.), India*, Dec. 01, 2012.
8. I have delivered a talk entitled "*The Transit Light Curve Project II. Two Transits of the Exoplanet OGLE-TR-111b*", at *Dept. of Physics and Institute of Astronomy, National Tsing Hua University, Hsinchu 30013, Taiwan (R.O.C.)*, December 29, 2009.
9. I have delivered a talk entitled "*Self-consistent Triaxial de Zeeuw-Carollo models*" at *Dept. of Physics and Institute of Astronomy, National Tsing Hua University, Hsinchu 30013, Taiwan (R.O.C.)*, October 12, 2007.
10. I have delivered a talk entitled "*A New Scenario for the Origin of Galactic Warps*", at *Institute of Astronomy, National Central University, Chung-Li 320, Taiwan (R.O.C.)*.
11. I have delivered a Colloquium talk entitled "*Formation of Symmetric Two-Armed Nuclear Spirals in Barred Galaxies*", at *Institute of Astronomy, Academia Sinica, Taipei, Taiwan (R.O.C.)*, March 17, 2006.
12. I have delivered a Colloquium talk entitled "*SPH Simulations for Formation of Nuclear Spirals in Barred Galaxies*", at *Institute of Astronomy, National Central University, Chung-Li 320, Taiwan (R.O.C.)*, October 7, 2005.
13. I have delivered a Colloquium talk entitled "*Intrinsic Shapes of Elliptical Galaxies*" at *Seoul National University (SNU), Seoul 151-742, South Korea*, April 15, 2003.

PAPER PRESENTED AT CONFERENCES

1. *AstroSat Observation of 2016 Outburst of H 1743-322: Spectral and Timing Results*, Swadesh Chand, V. K. Agrawal, G. C. Dewangan, Prakash Tripathi, **Parijat Thakur**, *5 Years of AstroSat*, hosted by the Indian Space Research Organisation (ISRO), Bengaluru from January 19-21, 2021.
2. *Exploring Transit Timing Variation of Extra-solar Planet TrES-5b through follow-up observations using the 2.0m HCT*, Vineet Kumar Mannaday, **Parijat Thakur**, Ing-Guey Jiang, D. K. Sahu, Martin Vanko, Emil Kundra, Li-Hsin Su, Devesh P. Sariya, Li-Chin Yeh, *HCT20 Science Meeting*, held at the Indian Institute of Astrophysics (IIA), Bangalore, India during September 29-30, 2020.
3. *Exploring the Existence of an Additional Planet in the hot-Jupiter Extra-solar Planetary System TrES-5*, Vineet Kumar Mannaday, **Parijat Thakur**, Ing-Guey Jiang, D. K. Sahu, Martin Vanko, Li-Chin Yeh, Li-Hsin Su, Devesh P. Sariya, *Exoplanets in Southern California 2020 Conference (ExSoCal 2020)* held at College of Natural and Agriculture Sciences, Riverside, CA, during September 14-15, 2020.
4. *Probing Transit Timing Variation and its Possible Causes in the Hot-Jupiter System TrES-3*, Vineet Kumar Mannaday, **Parijat Thakur**, Ing-Guey Jiang, D. K. Sahu, *Young Astronomer's Meet 2019 (YAM 2019)*, held at the Kodaikanal Solar Observatory (IIA), Kodaikanal, Tamil Nadu, India from 23-27 September, 2019.
5. *Spectral and temporal analysis of the low-mass black hole X-ray binary H 1743-322 with two joint views by XMM-Newton and NuSTAR during the rising phase of 2016 outburst*, Swadesh Chand, V. K. Agrawal, G. C. Dewangan, Prakash Tripathi, **Parijat Thakur**, *Recent Trends in the Study of Compact Objects: Theory and Observation (RETCO-IV)*, held at IUCAA, Pune, India from April 17-20, 2019

6. *Spectral and Temporal study of LMC X-1 with a joint XMM-Newton and NuTSAR observation*, Swadesh Chand, V. K. Agrawal, G. C. Dewangan, Prakash Tripathi, **Parijat Thakur**, *Exploring the Universe: Near Earth Space Science to Extra- Galactic Astronomy*, held at S. N. Bose National Centre for Basic Sciences held from November 14 - 17, 2018.
7. *Exploring the additional planet in the Extra-solar Planetary system Qatar-1*, Vineet Kumar Mannaday, **Parijat Thakur**, Ing-Guey Jiang, D. K. Sahu, *Exploring the Universe: Near Earth Space Science to Extra-Galactic Astronomy*, held at the S. N. Bose National Center for Basic Sciences, Kolkata, India during 14-17 November, 2018.
8. *A spectral and Temporal study of the High Massive Black Hole Binary LMC X-1*, Swadesh Chand, V. K. Agrawal, G. C. Dewangan, Prakash Tripathi, **Parijat Thakur**, Young Astronomer Meet 2018 (YAM 2018), held at Physical Research Laboratory (PRL) from September 24-28, 2018.
9. *Transit Timing Variations Analysis of Extra-solar Planet Qatar-1b*, **Parijat Thakur**, Vineet Kumar, Ing-Guey Jiang, D. K. Sahu, Swadesh Chand, *National Conference on Signal Processing, Sustainable Energy Materials and Astronomy and Astrophysics (NSSEMA -2017)* held at Pandit Ravishankar Shukla University, Raipur, March 28 - 30, 2017.
10. *Comparative Study of JKTEBOP and TAP codes for Light Curve Analysis of the Extra-solar Planetary Systems*, Vineet Kumar Mannaday, **Parijat Thakur**, Ing-Guey Jiang, D. K. Sahu, Swadesh Chand, *National Conference on Signal Processing, Sustainable Energy Materials and Astronomy and Astrophysics (NSSEMA -2017)* held at Pandit Ravishankar Shukla University, Raipur, March 28 - 30, 2017.
11. *A Spectral and Temporal Study of Black Hole X-Ray Binary LMC X-1*, Swadesh Chand and **Parijat Thakur**, *National Conference on Signal Processing, Sustainable Energy Materials and Astronomy and Astrophysics (NSSEMA -2017)* held at Pandit Ravishankar Shukla University, Raipur, March 28 - 30, 2017.
12. *Transit Timing Variation Analysis of Extra-solar Planet Qatar-1b with Three New Transits*, **Parijat Thakur**, Vineet kumar, Ing-Guey Jiang, D. K. Sahu, Swadesh Chand, *35th Meeting of the Astronomical Society of India (ASI-2017)* held at Birla Institute of Scientific Research (BISR), Jaipur, March 6 - 10, 2017.
13. *Comparative Study of JKTEBOP and TAP codes for Estimating Physical and Orbital parameters of Extra-solar Planetary Systems*, Vineet Kumar Mannaday, **Parijat Thakur**, Ing-Guey Jiang, D. K. Sahu, Y. C. Joshi, Swadesh Chand, *35th Meeting of the Astronomical Society of India (ASI-2017)* held at Birla Institute of Scientific Research (BISR), Jaipur, March 6 - 10, 2017.
14. *Investigating Extra-solar Planetary System Qatar-1 through Transit Observations*, **Parijat Thakur**, Vineet Kumar Mannaday, Ing-Guey Jiang, D. K. Sahu, & Swadesh Chand, *International Conference on Instrumentation and Science with 3.6-m and 4.0-m ILMT Telescope* held at the Aryabhata Research Institute of Observation Sciences (ARIES), Nainital, India, November 15 - 18, 2016.
15. *Role of Bar Strength to Power AGN in Barred Galaxies*, **Parijat Thakur**, Ing-Guey Jiang, and H.B. Ann, One Day National Seminar (ASCMTA-2015), held at Dept. of Pure & Applied Physics, Guru Ghasidas Central University, Bilaspur (C.G.). India, March 30, 2015.
16. *Significance of Charge-Coupled Device (CCD) in Stellar Photometry*, **Parijat Thakur**, AICON-2014, held at Chhatrapati Shivaji Institute of Technology, Durg (C.G.), India, April 25-26, 2014.
17. *Probing Extra-solar Planets through Transit Observations*, **Parijat Thakur**, Two days National Workshop on Particle Accelerator for Interdisciplinary Research, held at Dept. of Pure & Applied Physics, Guru Ghasidas Central University, Bilaspur (C.G.), India, Feb. 18-19, 2014.
18. *Nuclear Spirals and AGN Fueling in Barred Galaxies*, **Parijat Thakur**, Two days National Workshop cum Theme Meeting, held at Dept. of Pure & Applied Physics, Guru Ghasidas Central University, Bilaspur (C.G.), India, Aug. 19-20. 2013.
19. *Transit Timing Variation Analysis of Exoplanet TrES-3b with Five New Transits*, **Parijat Thakur**, Ing-Guey Jiang, Li-Chin Yeh, , Ping Chien, Yi-Ling Lin, Yu-Ting Wu, Hong-Yu Chen, Zhao Sun and Jianghui Ji, 30th Meeting of Astronomical Society of India (**ASI-2013**), held at the Indian Institute of Space Science and Technology (IIST), Thiruvanthapuram. India, Feb. 20- 22, 2013.
20. *Effect of Bar Strength on Gas Fueling in Barred Galaxies*, Parijat Thakur, Ing-Guey Jiang, and H.B. Ann, **International Conference (39th COSPAR Assembly organized by Committee on Space Research, France)**, held at Narayan Murthy Centre of Excellence (INFOSYS), Mysore, India, July 14-22, 2012.
21. *A Transit Timing Analysis of the Exoplanet System TrES-3*, **Parijat Thakur**, Ing-Guey Jiang, Li-Chin Yeh, , Ping Chien, Yi-Ling Lin, Yu-Ting Wu, Hong-Yu Chen, Zhao Sun and Jianghui Ji, **International Conference (39th COSPAR Assembly organized by Committee on Space Research, France)**, held at Narayan Murthy Centre of Excellence (INFOSYS), Mysore, India, July 14-22, 2012.
22. *Astronomical Image Processing with IRAF Package*, **Parijat Thakur**, AICON-2012, held at Chhatrapati Shivaji Institute of Technology, Durg (C.G.), India, Jan. 20-21, 2012.

23. *Investigating Close-in Exoplanets through Transit Observations and Orbital Simulations*, Ing-Guey Jiang, Li-Chin Yeh, **Parijat Thakur**, Ping Chien, Yi-Ling Lin, Yu-Ting Wu, Hong-Yu Chen, Zhao Sun and Jianghui Ji, 11th Asian-Pacific Regional International Astronomical Meeting (IAU), held at *The Empress Hotel & Convention Centre, Chiang-Mai, Thailand*, July 26-29, 2011.
24. *Planet Destruction Rate of Occurrence and Observability: Has Planet Accretion Been Recently Found?*, American Astronomical Society Meeting, April 25-27, 2011.
25. *Could "Bloatars" be Stars with Planets Undergoing Destruction?*, Stuart Taylor, Ing-Guey Jiang and Parijat Thakur, Annual Meeting of Astronomical Society of Republic of China (ROC), held at *National Science and Technology Museum (NSTM), Kaohsiung, Taiwan*, May 25-29, 2011.
26. *The First Transit Light Curve of NETS Project*, Ing-Guey Jiang, Parijat Thakur, Stuart Taylor, Ping Chieng, Ya-Ju Kang, Yi-Hang Tung, Yu-Ting Wu, Zhao Sun, Jianghui Ji, David Mkrichian and Uri Griv, **PSROC-2011**, held at *National Taiwan Normal University, Taipei, Taiwan*, Jan. 25-27, 2011.
27. *Aborted Planet Destruction: Seeking Observational Signs of Exoplanet Tidal Migration*, Stuart Taylor, Ing-Guey Jiang, Parijat Thakur and Ping Chieng, **PSROC-2011**, held at *National Taiwan Normal University, Taipei, Taiwan*, Jan. 25-27, 2011.
28. *Nuclear Spirals and Gas Fueling in Barred Galaxies: Effect of Bar Strength*, Parijat Thakur, Ing-Guey Jiang and H.B. Ann, **PSROC-2009**, held at *National Changhua University of Education, Changhua City, Taiwan*, Jan. 19-21, 2009.
29. *Nuclear Spirals and Bulge Central Density Core/Cusps*, Parijat Thakur, Ing-Guey Jiang, and H.B. Ann, *Galactic Center Workshop - 2006*, held at *Physikzentrum Bad Honnef, Cologne, Germany*, April 18-22, 2006.
30. *Significance of Bulge Central Density Core/Cusps on the Formations of Nuclear Spirals in Barred Galaxies*, Parijat Thakur, Ing-Guey Jiang, and H.B. Ann, **CPS-2006**, held at *National Taiwan University, Taipei, Taiwan*, Jan. 16-18, 2006.
31. *Nuclear Spirals in Barred Galaxies: Effects of Bulge Central Density Concentration on their Formations*, Parijat Thakur, H.B. Ann, C.M. Ko and Ing-Guey Jiang, **CAST-2005**, held at *Institute of Astronomy, National Central University, Chung-Li, Taiwan*, June 3-4, 2005.
32. *Self-consistent prolate triaxial Models*, Parijat Thakur, 21st Jerusalem Winter School in Theoretical Physics on *The Origin of Galaxies*, held at Institute for Advanced Studies, The Hebrew University, **Jerusalem, Israel**, Dec. 29, 2003 - Jan. 8, 2004.
33. *Nuclear Spirals and Supermassive Black Holes*, H.B. Ann and Parijat Thakur, 25th GA of IAU held at **Sydney Australia**, July 13-26, 2003.
34. *Self-consistent dynamical modeling of triaxial galaxy*, Parijat Thakur, 1st Chhattisgarh Young Scientist Congress, Sponsored by CGCOST, held at Pt. Ravishankar Shukla University, Raipur, India, Sept. 2-3, 2002.
35. *Intrinsic shape of elliptical galaxy NGC 661*, D.K. Chakraborty, Mousumi Das and Parijat Thakur, 24th GA of IAU held at **Manchester, U.K.**, Aug. 7-18, 2000.
36. *Correlated projected properties of triaxial mass models*, Parijat Thakur and D.K. Chakraborty, ASI-2000 held at Gorakhpur, India, Nov. 15-18, 2000.
37. *Dynamical modeling of some elliptical galaxies*, Parijat Thakur, D.K. Chakraborty and D.K. Sahu, YAM '98, held at RRI, Bangalore, India, Feb. 25-28, 1998.
38. *Intrinsic shapes of elliptical galaxies*, Parijat Thakur and D.K. Chakraborty, Scientific meeting Sponsored by MAP-COST on National Science Day, held at Pt. R.S.S. University, Raipur, India, Feb. 28, 1998.
39. *Dynamical modeling of elliptical galaxy NGC 2513*, Parijat Thakur, D.K. Sahu and D.K. Chakraborty, XVIII Annual meeting of Astronomical Society of India, held at PRL, Ahmedabad, India, Nov. 28 to Dec. 01, 1997.
40. *Dynamical modeling of some elliptical galaxies*, D.K. Chakraborty, D.K. Sahu and Parijat Thakur, 23rd GA of IAU, held at **Kyoto, Japan**, Aug. 18-31, 1997.

WORKSHOP/CONFERENCE/SCHOOL ATTENDED (18)

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- National Workshop on *Particle Accelerators for Interdisciplinary Research* held at Guru Ghasidas Vishwavidyalaya, Bilaspur (C.G.), India, Feb. 18-19, 2014.
 - National Workshop cum Theme Meeting on *Ion Beam Induced Material Modifications & Neutron Generation using 3 – MV Particle Accelerator: Applications in Physical, Chemical and Life Sciences* held at Guru Ghasidas Vishwavidyalaya, Bilaspur (C.G.), India, Aug. 19-20, 2013.
 - TIARA Winter School on *Numerical Astrophysics* held at *The Theoretical Institute for Advanced Research in Astrophysics (TIARA), National Tsing-Hua University, Hsinchu, Taiwan*, Jan. 18-22, 2011.

- TIARA Winter School on *Galaxies and Stellar Clusters held at The Theoretical Institute for Advanced Research in Astrophysics (TIARA), National Tsing-Hua, University, Hsinchu, Taiwan*, Jan. 25-29, 2010.
- The Annual Meeting of the Physical Society of the Republic of China (**PSROC-2009**) held at *National Changhua University of Education, Changhua City, Taiwan*, Jan. 19-21, 2009.
- TIARA Winter School on *Exoplanet, held at The Theoretical Institute for Advanced Research in Astrophysics (TIARA), National Tsing-Hua, University, Hsinchu, Taiwan*, Jan. 21-25, 2008.
- Symposium on *Galactic Center - From the Center of the Milky Way to Nearby Low-Luminosity Galactic Nuclei, held at Physikzentrum Bad Honnef, Cologne, Germany*, April 18-22, 2006.
- The Annual Meeting of the Chinese Physical Society (**CPS-2006**) held at *National Taiwan University, Taipei, Taiwan*, Jan. 16-18, 2006.
- The Annual Meeting of the Chinese Astronomical Society (**CAST-2005**) held at *Institute of Astronomy, National Central University, Chung-Li 320, Taiwan*, June 3-4, 2005.
- International Conference on Cosmic Rays and Magnetic Fields in Large Scale Structure (3rd Korean Astrophysics Workshop), held at Pusan National University, **Pusan, South Korea**, Aug. 16-20, 2004.
- 21st Jerusalem Winter School in Theoretical Physics on *Origin of Galaxies* held at Institute for Advanced Studies, The Hebrew University, **Jerusalem, Israel**, Dec. 29, 2003 - Jan. 8, 2004.
- *Summer Course on Mission Concept and Payload Design in X- and Gamma-Ray Astronomy*, July 1-12, 2002, held at **Bologna, Italy**.
- Workshop on *Structure and Dynamics of Elliptical Galaxies* organized by IUCAA, Pune, at Pt. Ravishankar Shukla University, Raipur, India, Sept., 27-30, 2001.
- INDO-FRENCH workshop on *starburst and structure and evolution of galaxies* held at IUCAA, Pune, India, Dec. 11-21, 2000.
- Workshop on *Database, Data Visualization and Image Processing* held at IUCAA, Pune, India, Nov. 15-24, 1998.
- Workshop on the *Dynamics at the centres of Galaxies* held at IUCAA, Pune, India, July 3-5, 1997.
- IUCAA-NCRA Graduate school held at IUCAA, Pune, India, in the field of *Galactic Structure and Dynamics*, Jan. 29 - Mar. 7, 1997.
- Workshop on *Astronomical Image Processing and the Internet* organized by IUCAA, Pune, at University of Kerala, Thiruvananthapuram, India, Dec. 20-24, 1996.

OBSERVATIONAL RESEARCH PROPOSAL

- **AstroSat (which is the first dedicated Indian astronomy space mission aimed at studying celestial sources in X-ray, optical and UV spectral bands simultaneously)** target of opportunity (ToO) observation proposal on Black Hole X-ray transient V4641 Sgr entitled "*AstroSat observation of X-ray brightening from the black hole X-ray binary V4641 Sgr*" was accepted, and the source was observed from October 19 at 17:52:01 UTC to October 22 at 18:13:33 UTC, 2021. We also wrote an Astronomer's Telegram on the basis of preliminary spectral and timing analysis of the source using this AstroSat observation (ATel#15010).
- **AstroSat (which is the first dedicated Indian astronomy space mission aimed at studying celestial sources in X-ray, optical and UV spectral bands simultaneously)** target of opportunity (ToO) observation proposal on X-ray transient MAXI J1803-298 entitled "*Following up a new X-ray transient MAXI J1803-298 with AstroSat*" was accepted, and the source was observed on May 11, 2021 from 01:09UTC to 11:59 UTC. We also wrote an Astronomer's Telegram on the basis of preliminary spectral and timing analysis of the source using this AstroSat observation (ATel#14630).
- For 2020 (Cycle 2-3), and 2019 (Cycle 1-3) our observational research proposals entitled "*Investigating Close-in Extra-solar Planetary systems through Photometric Follow-up of their Transits*" were accepted by the 2-m HCT Time Allocation Committee, **Indian Astronomical Observatory (IAO), Hanle, Indian Institute of Astrophysics (IIA), Bangalore**.
- For 2020 (Cycle 1, Cycle 3), 2019 (Cycle 3) and 2018 (Cycle 2), our observational research proposals entitled "*Investigating Close-in Extra-solar Planetary systems through Photometric Follow-up of their Transits*" were accepted by the 1.3-m J. C. B. Telescope time allocation committee (JTAC), **Vainu Bappu Observatory (VBO), Kavalur, Indian Institute of Astrophysics (IIA), Bangalore**.
- For 2018 (Cycle 1), 2017 (Cycle 1 & 2) and 2016 (Cycle 2 & 3), our observational research proposals entitled "*Investigating Close-in Extra-solar Planets through Photometric Follow-up of their Transits*" were accepted by the 2-m HCT Time Allocation Committee, **Indian Astronomical Observatory (IAO), Hanle, Indian Institute of Astrophysics (IIA), Bangalore**.
- For 2018 (Cycle 1 & 2), our observational research proposals entitled "*Investigating Close-in Extra-solar Planets through Photometric Follow-up of their Transits*" were accepted by the 1.3 JCBT Time Allocation Committee, **Vainu Bappu Observatory (VBO), Kavalur, Indian Institute of Astrophysics (IIA), Bangalore**.

- For Cycle 2017A, our observational research proposal entitled "*Investigating Close-in Extra-solar Planets through Photometric Follow-up of their Transits*" was accepted by the Joint Time Allocation Committee, **ARIES**, Nainital, India.
- For the Cycle 2013B, our observational research proposal entitled "*Monitoring Nearby Stars with Close-in Planets for Transit Events*" was accepted by the Joint Time Allocation Committee, **Aryabhata Research Institute of Observational Sciences (ARIES)**, Nainital, India and we were allocated five observing nights during April-May, 2013.
- For the Cycle 2012C, our observational research proposal entitled "*Monitoring Nearby Stars with Close-in Planets for Transit Events*" was accepted by the Joint Time Allocation Committee, **Aryabhata Research Institute of Observational Sciences (ARIES)**, Nainital, India and we were allocated four observing nights during Oct.-Dec., 2012.
- For the Cycle 2012B, our observational research proposal entitled "*Monitoring Nearby Stars with Close-in Planets for Transit Events*" was accepted by the Joint Time Allocation Committee, **Aryabhata Research Institute of Observational Sciences (ARIES)**, Nainital, India and we were allocated five observing nights during May-June, 2012.
- During 2009-2011, our several observational research projects based the *Transiting Extra-solar Planetary Systems* were accepted by **the Tenagra Observatory, Arizona, U.S.A.**
- During 2009-2011, our several observational research projects based the *Transiting Extra-solar Planetary Systems* were accepted by **the Lulin Observatory, Taiwan.**

OBSERVATIONAL/DATA REDUCTION EXPERIENCE

- Knowing the Reduction and Analysis techniques to handle the Astronomical Data taken by the various Space Based Telescopes such as XMM-Newton, NuSTAR, and AstroSat.
- Knowing the Spectral and Timing Analysis of Blackhole X-ray Binaries.
- I have observing and data reduction experiences of "*the nearby stars with close-in extra-solar planets for possible transit events*" in the optical bands using **the 2-m HCT and 1.3-m JCBT Telescopes at Indian Institute of Astrophysics (IIA), Bangalore, India.**
- I have observing and data reduction experiences of "*the nearby stars with close-in extra-solar planets for possible transit events*" in the optical bands using **the 104-cm and 130-cm Telescopes at Aryabhata Research Institute of Observational Sciences (ARIES), Nainital, India.**
- I have observing and data reduction experiences of "*the nearby stars with close-in extra-solar planets for possible transit events*" in the optical bands using **the 0.81-m Telescope at Tenagra Observatory, Arizona, U.S.A..**
- I have observing and data reduction experiences of "*the nearby stars with close-in extra-solar planets for possible transit events*" in the optical bands using **the Lulin 1-m Telescope (LOT) at Lulin Observatory, Taiwan.**
- I have observing and data reduction experience of barred spiral galaxies in the optical bands using **the 2-m Himalayan Chandra Telescope (HCT) at Indian Astronomical Observatory (IAO), Hanle, which is remotely operated from Centre for Research and Education in Science and Technology (CREST), Hosakote, Indian Institute of Astrophysics (IIA), Koramanagala, Bangalore, India.**
- I have observing and data reduction experience of barred spiral galaxies in the optical bands using **the 1.8-m Telescope at Bohyunsan Optical Astronomy Observatory (BOAO) in South Korea.**
- I have experience of reducing CCD Images of the nearby stars with close-in planets to carry out their aperture photometry using IRAF package.
- I have experience of reducing CCD Images of Elliptical and Barred spiral galaxies to carry out their surface photometry using IRAF and STSDAS packages.
- In the final year of M.Sc. (Physics), I have carried out a project work in observational astronomy entitled "*Photometric Study of RS CVn Binary Star - Ux Aris*" under the supervision of **Prof. S.K. Pandey**. In this project work, I have done the following studies:
 - In order to do the differential photometry, the BVR photoelectric photometric observations of *the RS CVn Binary Star - Ux Aris* were carried out, along with those of the comparison and check stars, using 0.35-m Schmidt-Cassegrain telescope equipped with SSP-5 photoelectric photometer and Johnson standard broad band filters.
 - Here I have calculated extinction coefficients for each night of observations to correct the instrumental magnitude of *RS CVn Binary Star - Ux Aris* for atmospheric extinction.
 - Furthermore, the transformation coefficients were also calculated to convert the atmospheric extinction corrected instrumental magnitude into the Johnson's standard system.
 - After above steps, I plotted the light curves between the phase and amplitude for the BVR filters to see the variability of the *RS CVn Binary Star - Ux Aris*.

COMPUTER SKILLS

- Knowing the Reduction and Analysis Packages to handle the Astronomical Data Taken by Gound Based Telescopes:
 1. Pre-processing and Aperture Photmetry of Stars using Various Tasks within Image Reduction and Analysis Facility (IRAF)
 2. Pre-processing and Surface Photmetry of Elliptical Galaxies using STSDAS within Image Reduction and Analysis Facility (IRAF)
- Knowing the Reduction and Analysis Packages to handle the Astronomical Data Taken by Space Based Telescopes:
 1. Initial Processing of processing XMM-Newton data using Science Analysis System (SAS)
 2. Initial Processing of processing NuSTAR data using the *nupipeline task* available within *NuSTARDAS*
 3. Initial Processing of the SXT data taken by AstroSat using the SXTPIPELINE, the SXT event merger tool, and sxtARFModule tool
 4. Initial Processing of the LAXPC data taken by AstroSat using Laxpcsoft.
- Spectral and Timing Analysis of Blackhole X-ray Binaries using the following packages:
 1. Interactive Spectral Interpretation System (ISIS)
 2. FTOOLS within HEASoft
 3. Various Tasks within FTOOLS such as XSPEC and XRONOS package available under XANADU software package
 4. GHATS package for Timing Analysis
- I have experience of running NBODY PMSPH/TREESPH Simulations in the followinghigh performance computers:
 1. the Formosa and IBM PC Cluster at *the National Center for High-performance Computing (NCHC), Hsinchu Science Park, Hsinchu, Taiwan.*
 2. the PC Cluster (IANCU) located at *Dept. of Physics and Institute of Astronomy, National Tsing Hua University, Hsinchu, Taiwan,*
 3. the supercomputer facilities at *the Korea Institute of Science and Technology Information (KISTI),*
- I have experience of working with NBODY PMSPH & TREESPH Codes written in Fortran/C.
- Well acquainted with computer systems like Pentium-4, SUN-SPARC-Classic, SUN-SPARC-4.
- Well acquainted with administration of various operating systems like Unix, Solaris, Linux, Windows 95/98/XP.
- Other packages like:
 1. SM PLOT, PG PLOT, and XMGRACE PLOT,
 2. Working experience with the Scilab/Matlab for plotting,
 3. Working experience with the IDL,
 4. Working experience with Mathematica,
 5. LATEX for typing paper/document,
 6. GIMP, Xfig, and xv for editing images,
 7. Windows 95/98/XP based softwares.
- Knowing Computer Programing Languages: Basic, Fortran 77, and C.
- Well acquainted with Internet.

EXPERIENCE OF MAINTAINING THE OBSERVATORY/COMPUTER CENTER

- We (I along with Prof. Ing-Guey Jiang) are working to setup a prototype system at *Dept. of Physics and Institute of Astronomy, National Tsing Hua University, Hsinchu, Taiwan,* for exoplanets search project.
- During my Ph.D. period, I was directly involved in the maintenance of *0.15-m manually operated reflector type telescope and 0.35-m Schmidt-Cassegrain telescope, respectively, equipped with SSP-3 and SSP-5 photoelectric photometer,* installed at School of Studies in Physics and Astrophysics, Pt. Ravishankar Shukla University, Raipur (C.G.) 492 010, India.
- During my Ph.D. period, I was directly involved in the administration of computer center at School of Studies in Physics and Astrophysics, Pt. Ravishankar Shukla University, Raipur (C.G.) 492 010, India.

TEACHING EXPERIENCE (NEARLY 13 YEARS)

- I have joined as an **Associate Professor** at *Dept. of Pure & Applied Physics, Guru Ghasidas Vishwavidyalaya (A Central University), Bilaspur (C.G.) 495 009, India* on May 20, 2011. Since then I have been teaching the following papers to Pre-Ph.D. Course Work, the M.Sc. (Physics) and B.Sc. (Physics) students of *Dept. of Pure & Applied Physics* and B.Tech. students of *School of Engineering and Technology*:
 - Pre-Ph.D. Course Work (Physics) - Astronomy and Astrophysics
 - M.Sc. (Physics, 1st semester) - Classical Mechanics
 - B.Sc. (Physics, 2nd semester) - Waves and Optics
 - B.Sc. (Physics, 4th semester) - Optics
 - B.Sc. (Physics Lab., 4th semester) - Optics
 - B.Sc. (Physics, 3rd semester) - Heat & Thermodynamics
 - B.Sc. (Physics Lab., 1st semester) - General Mechanics
 - B.Tech. - Engineering Physics
 - B.Tech. - Engineering Physics Lab.
- I was appointed as an adhoc lecturer at School of Studies in Physics and Astrophysics, Pt. Ravishankar Shukla University, Raipur (C.G.) 492 010, India. During this period (**Sept. 26, 2002 to Jan. 28, 2003**), I taught the following papers to M.Sc. (Physics) Students:
 - Astronomy & Astrophysics
 - Electrodynamics
 - Mathematical Physics.
- During my Ph.D. period (**July 1, 1996 to April 26, 2002**) at School of Studies in Physics and Astrophysics, Pt. Ravishankar Shukla University, Raipur (C.G.) 492 010, India, I was directly involved in teaching of the following laboratory courses to M.Sc. Students:
 - Observational Astronomy that includes measurements of extinction & transformation coefficients, differential photometry of variable stars, HR diagram of open cluster.
 - Computer Programming and Numerical Analysis using Fortran 77.

SYLLABUS PREPARATION

- I have prepared syllabus of *Paper - III: Astronomy and Astrophysics* for Pre-Ph.D. Course Work Programme of the Dept. of Pure & Applied Physics, Guru Ghasidas Vishwavidyalaya, Bilaspur (C.G.).
- In order to start the specialization in **Astronomy & Astrophysics** for the M.Sc.(Physics) students of the Dept. of Pure & Applied Physics, Guru Ghasidas Vishwavidyalaya, Bilaspur (C.G.), during the Academic Session 2014-2015, I have designed the syllabus.
- I have also modified the existing syllabus of the "Classical Mechanics" for the M.Sc. (Physics) students.
- I was also involved in the preparation of the syllabus for the "Engineering Physics" course of the B.Tech students.

UNIVERSITY LEVEL RESPONSIBILITIES / MEMBER OF UNIVERSITY LEVEL VARIOUS COMMITTEES

- A Member of Committee Constituted to Design the Rules and Regulations for **the Admission of Foreign Students** in Various Department of GGV through the Indian Council for Culture Relation (ICCR), New Delhi.
- A Member of **Academic Council** of Guru Ghasidas Vishwavidyalaya (A Central University), Bilaspur (C.G.), for 3 years starting from 30-10-2021.
- Appointed as a **Nodal Officer** for the National Science Day Celebration - 2022 at Guru Ghasidas Vishwavidyalaya (A Central University), Bilaspur (C.G.).
- A Member of Academic Planning, Development and Monitoring Board (APDMB) of Guru Ghasidas Vishwavidyalaya (A Central University), Bilaspur (C.G.), for 3 years starting from 22-09-2021.
- A Member of Committee Constituted to Prepare Terms and Conditions of Expression of Interest (EOI) for Research Purchasing Books, as well as for the Subscription of International Research Journals.
- A Member of **Standing Committee of Academic Council** of Guru Ghasidas Vishwavidyalaya (A Central University), Bilaspur (C.G.), from 14-09-2021 to 29-10-2021.
- Member of **Academic Council** of Guru Ghasidas Vishwavidyalaya (A Central University), Bilaspur (C.G.), from 30-10-2018 to 30-10-2021.
- As per the Office Order Dated 06-10-2021, Appointed as a Member of Committee Constituted to Resolve the UFM related issues of VET/VRET Entrance Exam Conducted Online in the Session 2021-2022.

- As per the Office Order Dated: 15-12-2020, Appointed as a **Convener** of A Committee Constituted for Technical Verification of Computer Systems and Printers Purchased by Guru Ghasidas Vishwavidyalaya (A Central University), Bilaspur (C.G.).
- As per the Office Order Dated 10-12-2019, Appointed as a **Co-coordinator** of Dr. Vikram Sarabhai Centenary Program Organized by National Remote Sensing Centre **ISRO**, Hyderabad in Association with CGCOST, Raipur and Guru Ghasidas Vishwavidyalaya (A Central University), Bilaspur (C.G.).
- As per the Office Order Dated: 10-12-2019, a Member of Committee Constituted to Give Increment to Ph.D./M.Tech./ME Degree Holder Faculty Members of Guru Ghasidas Vishwavidyalaya (A Central University), Bilaspur (C.G.).
- As per the Office Order Dated 18-09-2019, Appointed a Member of Technical Committee Constituted to Select PSU-III by Examining the Technical Bid of EoI Carefully.
- As per the Office Order Dated 12-07-2019, Appointed as a **Convener** of Committee Constituted to Accomplish the Printing of Admission Form, as well as the Admission Prospectus.
- As per the Office Order Dated 01-05-2019, Appointed as a Member of Committee Constituted to Determine the Equivalence of the Examination / Degree.
- As per the Office Order Dated 04-04-2019, Appointed as a Member of **Departmental Research Committee (DRC)** of Dept. of Pure & Applied Physics, Guru Ghasidas Vishwavidyalaya (A Central University), Bilaspur (C.G.) for 2 years starting from 04-04-2019.
- As per the Office Order Dated: 06-02-2019, Appointed as a **Convener** of Technical Committee Constituted to Purchase CCTV Camera at the Campus/Department/Offices of Guru Ghasidas Vishwavidyalaya (A Central University), Bilaspur (C.G.).
- As per the Office Order Dated 17-12-2018, Appointed as a Member of Committee Constituted to Prepare the Tender Format for University Cafeteria.
- Working as an **Administrative Warden** of Swami Vikekanand Boys Hostel, Guru Vishwavidyalaya (A Central University), Bilaspur (C.G.), since 08-03-2018.
- As per the Office Order Dated 06-11-2018, Appointed as a **Center Superintendent** at Physics Building for the Smooth Conduction of End Semester Examination in the year of 2018..
- As per the Office Order Dated 20-11-2017, Appointed as a Member of Technical Committee Constituted to Establish E-Class Room / Smart Classroom in Various Department of Guru Ghasidas Vishwavidyalaya (A Central University), Bilaspur (C.G.).
- As per the Office Order Dated 16-02-2017, Appointed as a Member of **Board of Studies in Physics**, Dept. of Pure & Applied Physics, Guru Ghasidas Vishwavidyalaya (A Central University), Bilaspur (C.G.), for 3 years starting from 16-02-2017.
- Appointed as a **Center Superintendent** at Physics Building for the Smooth Conduction of End Semester Examination in the year of 2017.
- Coordinator of the Committee Constituted for the Admission to M.Sc. (Physics) and M.Sc. (Electronics) (June 23, 2016).
- Chairperson of the Committee Constituted to Conduct the Project Defense of M.Sc. (Physics) and B.Sc. (Physics) (May 20, 2016).
- Appointed as an Observer to Conduct the External Bio-chemistry Practical Examination of B.Pharm. IV-Sem. at GGV (May 06, 2016).
- Appointed as an Observer to Conduct the External In-organic Chemistry Practical Examination of B.Sc. (Chemistry) VI-Sem. at GGV (May 04, 2016).
- Appointed as an Observer to Conduct the External Chemistry Practical Examination of B.Sc. (Chemistry) II-Sem. at GGV (April 25, 2016).
- Appointed as an Observer to Conduct the External Chemistry Practical Examination of B.Sc.(Forensic and Botany) II-Sem. at GGV (April 25, 2016).
- Appointed as an Observer to Conduct the External LBTL-407 Practical Examination of B.Sc. (Bio- technology) IV-Sem. at GGV (April 18, 2016).
- Assigned by the HOD, Dept. of Pure and Applied Physics, GGV to Encourage the Alumni of Department to get them Registered in Alumni Association of GGV, Bilaspur (C.G.) (April 5, 2016).
- Participation in DRC meeting as when conducted as an invitee member (March 09, 2016).
- Being a Member of Incubator As assigned Cell, Member of Local Organizing Committee of Workshop on Intellectual Property Rights, IP commercialization and Plagiarism at GGV by Incubator Cell, Bilaspur (C.G.) (Feb. 26, 2016).
- Appointed as an Observer to Conduct the External Practical Examination of M.C.A. I-Sem. at GGV, Bilaspur (C.G.) (Dec. 15, 2015).

- Appointed as an Observer to Conduct the External Practical Examination of B.Pharm. V-Sem. at GGV, Bilaspur (C.G.) (Dec. 9, 2015).
- Member of committee related to refreshment for celebration of Guru Ghasidas Jayanti (Dec 08, 2015).
- Member of the Core Committee Constituted for Smooth Conduction of End Semester Examination (Dec. 2, 2015).
- Appointed as an Observer to Conduct the External Chemistry Practical Examination of B.Sc. (Bio-Tech) III Sem. at GGV, Bilaspur (C.G.) (Nov. 16, 2015).
- Appointed as an Observer to Conduct the External In-organic Chemistry Practical Examination of B.Sc. (Chemistry) Vth Sem. at GGV, Bilaspur (C.G.) (Nov. 09, 2015).
- Member of the Anti-ragging and Discipline Committee of School of Physical Science, GGV, Bilaspur (C.G.) (July 16, 2015).
- Member of the Committee formed to perform the physical verification of the departmental assets for the year 2014-15 (July 07, 2015).
- Member of committee constituted for setting up of Design Innovation Centres, Open Design School and National Design Innovation Network (a new scheme launched by MHRD) at GGV, Bilaspur (C.G.), (June 27, 2015).
- Ex-officio Member of Advisory Committee Constituted for SAP granted by the UGC to Dept. of Pure & Applied Physics (Since 2014).
- Co-ordinator of the Committee Constituted to Conduct the External Project Defense of M.Sc. (Physics) IVth Sem., M.Sc. (Electronics) IInd Sem., and B.Sc. (Physics and Electronic) VIth Sem. at GGV, Bilaspur (C.G.) (May 27, 2015).
- Co-ordinator of the Committee Constituted to Conduct the Internal Project Defense of M.Sc. (Physics) IVth Sem., M.Sc. (Electronics) IInd Sem., and B.Sc. (Physics and Electronic) VIth Sem. at GGV, Bilaspur (C.G.) (May 26, 2015).
- Appointed as an Observer to Conduct the External Organics Chemistry Practical Examination of B.Sc. (Chemistry) VIth Sem. at GGV, Bilaspur (C.G.) (April 16, 2015).
- Appointed as an Observer to Conduct the External Practical Examination of M.Sc. (Computer Science) IInd Sem. at GGV, Bilaspur (C.G.) (April 16, 2015).
- Appointed as an Observer to Conduct the External Chemistry Practical Examination of B.Sc. (Bio-Tech.) IInd Sem. at GGV, Bilaspur (C.G.) (April 06, 2015).
- Member of Incubator cell (a new scheme launched by MHRD) to promote University Research Outcome for Patent filing and Technology Transfer at GGV, Bilaspur (C.G.) (March 31, 2015).
- Being a faculty member of Dept. of Pure & Applied Physics, GGV, Worked as a Member of Local Organizing Committee as well as Accommodation Committee formed for Smooth Conduction of One Day National Seminar (ASCMATA-2015) at Dept. of Pure Applied Physics (March 30, 2015).
- Appointed as an Observer to Conduct the External Chemistry Practical Examination of B.Tech. Ist Year at Institute of Technology, GGV, Bilaspur (C.G.) (March 25, 2015).
- Member of Document Verification Committee for the Appointment of Ad-hoc Assistant Professors at Dept. of Pure & Applied Physics, GGV (Feb. 12, 2015).
- From 30-12-2014 to 06-01-2015, Assigned to look after the official work of the Dept. of Pure & Applied, GGV as the Regular H.O.D was out of station. (Dec 26, 2014).
- Member of Placement Cell of School of Physical Sciences (Dec. 24, 2014).
- Member of committee related to refreshment for celebration of Guru Ghasidas Jayanti (Dec 11, 2014).
- Appointed as an Observer to Conduct the External In-organics Chemistry Practical Examination of B.Sc. (Chemistry) Vth Sem. at GGV (Nov. 28, 2014).
- Worked as Presiding Officer-I for Smooth conduction of the Student Council Election for the session 2014-15 (Oct. 15, 2014).
- Worked as a Coordinator of the Committee constituted by the HOD (Physics) to Prepare the Voter List for the Student Council Election for the Session 2014-15 (August 28, 2014).
- Member of the Anti-ragging and Discipline Committee of School of Physical Science (August 25, 2014).
- Appointed as a Superintendent of the UGC NET Examination conducted at Dept. of Pure & Applied Physics, GGV (June 26, 2014).
- Performed the Physical Verification of the Assets of the Forestry Hostel, GGV as a Member of Physical Verification Committee formed by the Registrar, GGV (June 06, 2014).
- Appointed to Evaluate the Answer Scripts of GGV VET & VRET Entrance Test (May 29, 2014).

- Appointed as an Observer of GGV VET & VRET Entrance Test Conducted at Mahant Laxminaran Das Mahavidyalaya, Raipur (C.G.) (May 16, 2014).
- Member of the Committee Constituted to Prepare the Ordinance for the Admission of Foreign Students at GGV, Bilaspur (C.G.) (May 07, 2014).
- Appointed as an Examiner to Conduct the External Practical Examination of B.Sc. (Physics) IVth Sem. at GGV, Bilaspur (C.G.) (April. 22, 2014).
- Being a faculty member of Dept. of Pure & Applied Physics, GGV, Worked as a Member of Local Organizing Committee as well as Accommodation Committee formed for Smooth Conduction of Two Days National Workshop on Particle Accelerators at Dept. of Pure Applied Physics (Feb. 18, 2014).
- Assigned by the H.O.D. (Physics) to look after the installation of Telephone and PABX at Accelerator Building, GGV (Jan 26, 2014).
- Performed Invigilation Duty for UGC-NET Examination Conducted (Dec. 17, 2013).
- Assigned to Upload the Model Answer of M.Sc. (Physics/Electronics) Papers at our University website (Dec. 04, 2013).
- Being a faculty member of Dept. of Pure & Applied Physics, GGV, Worked as a Member of Local Organizing Committee as well as Accommodation Committee formed for Smooth Conduction of Two Days National Workshop cum Theme Meeting at Dept. of Pure Applied Physics (Aug. 19, 2013).
- Member of committee formed for smooth conduction of Convocation Ceremony at GGV, Bilaspur (C.G.) (April 17, 2013).
- Member of the Anti-ragging and the Discipline Committee of School of Physical Science (August 06, 2013).
- Worked as a Member of Local Organizing Committee as well as Accommodation Committee formed for Smooth Conduction of One Day Acquaintance Program of IUAC, New Delhi (July 19, 2013).
- Appointed as a **Convener** of the Disciplinary Committee Constituted at Institute of Technology (IT), GGV, Bilaspur (C.G.) (June 25, 2013).
- Worked as a Member of Document Verification Committee for Admission to B.Tech. First Year through JEE Main (June 18, 2013).
- Assigned to check the necessary requirements at Dean & MS Bungalows for the Smooth Conduction of Workshop at Dept. of Pure & Applied Physics (May 21, 2013).
- Worked as a Member of Committee formed to look after the Disciplinary matter during the organization of the Convocation at GGV (April. 17, 2013).
- Assigned to Visit the Boys Hostels and Mess located in Type – II & IV Quarters at GGV, Bilaspur (C.G.) (April 08, 2013).
- Appointed to look after the Disciplinary matter during the Celebration of GGV Formation Day (Jan 16, 2013).
- Assigned to look after disciplinary matter during celebration of Tech-Fest (Equilibrio-2013) at Institute of Technology, GGV, Bilaspur (C.G.) (March 14, 2013).
- Member of committees related to building & distribution of stall and sitting arrangement for the celebration of Guru Ghasidas Vishwavidyalaya Foundation Day (Jan. 03, 2013).
- Worked as a member of the Committee formed Committee to Reform Curricula, Academic Calendar, Examination Pattern of Institute of Technology, GGV, Bilaspur (C.G.) (Dec. 26, 2012).
- Assigned to look after the Routine Work of Dept. of Basic Sciences & Humanities from Dec. 13, 2012 to Dec. 16, 2012 as Regular H.O.D. was out of station (Dec. 12, 2012).
- Member of the committee related to Debate, Essay, and Quiz Competitions for celebration of Guru Ghasidas Jayanti (Dec. 10, 2012).
- Appointed as an Examination **Assistant Center Superintendent** at Pharmacy Building for the Smooth Conduction of End Semester Examination (Nov. 27, 2012).
- Member of committee formed for the smooth conduction of Convocation Ceremony at GGV (Nov. 17, 2012).
- Worked as a Member of Committee formed to look after the Disciplinary matter during the organization of the Convocation at GGV (Nov. 17, 2012).
- Member of the committee related to the arrangement of transportation and vehicles during the celebration of the Chhattisgarh Rajya Utsav at Police Ground, Bilaspur (Nov. 02, 2012).
- Worked as a Member of Committee formed to prepare a polling booth at Institute of Technology and make an necessary arrangements at the Booth (Oct. 13, 2012).

- Worked as a Presiding Officer-I for Smooth conduction of the Student Council Election for the session 2012-13 (Oct. 11, 2012).
- Appointed as a **Convener** of the Disciplinary Committee Constituted at Institute of Technology (IT), GGV (Oct. 09, 2012).
- Assigned to look after the disciplinary matter during celebration of "KALRAV-2012", Institute of Technology, GGV, Bilaspur (C.G.) (Oct. 12, 2012).
- Assigned to look after the Routine Work of Dept. of Basic Sciences & Humanities from Sept. 25-26, 2012 as Regular H.O.D. was out of station (Sept. 25, 2012).
- Worked as a Special Invitee member of Purchase Committee formed at GGV, Bilaspur (C.G.) (Sept. 17, 2012).
- In charge of the GGV Stall at the Science College Ground, Raipur (C.G.) during the celebration of the Chhattisgarh Rajya Utsav at Raipur (C.G.) (Oct 10, 2012).
- Member of the committee formed for celebration of Annual Day at IT, GGV (Sept. 05, 2012).
- Worked as a member of Purchase Committee of Dept. of Basic Sciences and Humanities, Institute of Technology, GGV (Aug. 28, 2012).
- Worked as a member of Garden Committee constituted by H.O.D. Basic Sciences & Humanities (Aug. 03, 2012).
- Worked as B.Tech. First Year Course "A" Co-ordinator (Aug. 01, 2012).
- Assigned to look after the Routine Work of Dept. of Basic Sciences & Humanities from July 5-7, 2012 as Regular H.O.D. was out of station (July. 4, 2012).
- Appointed as a Member of Anti-ragging Committee of Institute of Technology (IT), GGV (July 03, 2012).
- Appointed to Evaluate the Answer Scripts of GGV VET & VRET Entrance Test (June 18, 2012).
- Assigned to look after the Routine Work of Dept. of Basic Sciences & Humanities as Regular H.O.D. was out of station (June 18, 2012).
- Assigned to provide the information to any interested Students inquiring for B.Tech. Admission 2012 (June 12, 2012).
- Assigned to look after the Routine Work of Dept. of Basic Sciences & Humanities as Regular H.O.D. was out of station (May 25, 2012).
- Worked as a Member of Document Verification Committee for Admission to B.Tech. First Year through AIEEE (May 24 18, 2012).
- Assigned to look after the Routine Work of Dept. of Basic Sciences & Humanities as Regular H.O.D. was out of station (April 07, 2012).
- Appointed as an Observer/Chief Examination Superintendant to Conduct the Annual Theory Examinations at Om Maya Sundaram Degree College, Vrindavan Chhaal (April 03, 2012).
- Appointed as an External Examiner to Conduct the External Physics Practical Examinations of B.Sc. Part I/II/III at Chaitanya College, Pamgrah (Feb. 22, 2012).
- Worked as a member of Promotion and Participation Committee for Science Day Celebration (Feb. 21, 2012).
- Appointed as an External Examiner to Conduct the External Physics Practical Examinations of B.Sc. Part III at Govt. J.P. Verma P.G. Arts & Commerce College, Bilaspur (C.G.), (Feb. 16, 2012).
- Appointed as an External Examiner to Conduct the External Physics Practical Examinations of B.Sc. Part II at C.M.D. College, Bilaspur (C.G.), (Feb. 25, 2012).
- Assigned to submit the Proposal for Smooth Conduct of End Semester Practical Exam of B.Tech. First Year (Dec 28, 2011).
- Appointed as an In-charge of Section-E of B.Tech First Year year (Aug. 23, 2011).
- Member of the committees related to building & distribution of stall and sitting arrangement for the celebration of Guru Ghasidas Vishwavidyalaya Foundation Day (Dec. 29, 2011).
- Member Training of Placement Cell of Institute of Technology, GGV, Bilaspur (C.G.) (Nov. 14, 2011).
- In charge of the GGV Stall at the Science College Ground, Raipur (C.G.) during the celebration of the Chhattisgarh Rajya Utsav at Raipur (C.G.) (Oct 28, 2011).
- Member of committee related Cultural Events during the celebration of "KALRAV-2011", Institute of Technology, GGV, Bilaspur (C.G.) (Sept.. 16, 2011).
- Appointed as an In-charge of Section-E of B.Tech First Year year (Aug. 23, 2011).
- Appointed as a Member of Anti-ragging Committee of Institute of Technology (IT), GGV, Bilaspur (C.G.) (Aug. 09, 2011).

- Worked as a Member of Document Verification Committee for Admission to B.Tech. First Year through AIEEE (July 14, 2011).
- Appointed as a Representative of the Dept. of Pure & Applied Physics for Walk in interview for Ad hoc Assistant Professors (July 13, 2011).
- Appointed as a Representative of the Dept. of Pure & Applied Physics for Walk in interview for Ad hoc Assistant Professors (July 13, 2011).
- Assigned to make necessary As assigned arrangements for the Smooth Conduct of End Semester Physics Practical Exam of B.Tech. First Year (May 20, 2011).

NAME AND ADDRESS OF REFEREES

- Prof. Ing-Guey Jiang⁶, Dept. of Physics and Institute of Astronomy, National Tsing Hua University, Hsinchu, Taiwan 30013, R.O.C.,
(email: jiang@phys.nthu.edu.tw; Phone No.: +886-3-5742258).
- Prof. Hong Bae Ann, Astronomy & Astrophysics Divn., Department of Earth Sciences, Pusan National University, Pusan 609-735, South Korea,
(email : hbann@pusan.ac.kr; Phone No.: +82-51-510-2705).
- Prof. Ajit Kembhavi, Retired Distinguished Professor & Former Director, Inter-University Centre for Astronomy and Astrophysics (IUCAA), Post Bag 4, Ganeshkhind, Pune - 411007, India,
(email : akk@iucaa.in; Phone No.: +91-20-2560-4101).
- Prof. T.P. Prabhu, Retired Distinguished Professor, Indian Institute of Astrophysics (IIA), Sarjapur Road, Koramangala, Bangalore - 560 034, India, (email : tpp@iiap.res.in; Phone No.: +91-80-25530672 Ext.: 279).
- Prof. S.K. Pandey, Retired Professor & Former Vice-Chancellor, Pt. Ravishankar Shukla University, Raipur - 492 010, India, (email : proskp@gmail.com; Phone No.: +91-771-2262871, +91-7000611663).
- Prof. G.C. Dewangan, Inter-University Centre for Astronomy and Astrophysics (IUCAA), Post Bag 4, Ganeshkhind, Pune - 411007, India,
(email : gulabd@iucaa.in; Phone No.: +91-9673744462).
- Dr. V.K. Agarwal, U. R. Rao Satellite Center, Outer Ring Road, Marathahalli, Bangalore - 560037, India,
(email : vivekag@urisc.gov.in; Phone No.: +91-7899859107).

I hereby certify that all the statements made by me in the application are true, complete and correct to the best of my knowledge and belief.

⁶who did Ph.D. under the supervision of Prof. James Binney Oxford University.

Place : Bilaspur (C.G.), India
Date : 25-01-2024

(Parijat Thakur)