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Professional:

Associate Research Professor

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Education:

2016-2019 Fudan University

Ph.D.

2009-2014 Indian Institute of Science Education and Research

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Research Interests:

- High energy astrophysics of relativistic jets launched by AGNs
- Multi-wavelength variability of Supermassive black holes
- X-ray reflection spectroscopy and continuum fitting methods
- Statistical methods in astrophysics and machine learning

Selected Publications:

1. Revisiting Radio Variability of the Blazar 3C 454.3, **Tripathi, Ashutosh**; Gupta, Alok C.; Smith, Krista Lynne; Wiita, Paul J.; Aller, Margo F.; Volvach, Alexandr E.; Lahteenmaki, Anne; Aller, Hugh D.; Tornikoski, Merja; Volvach, Larisa N., ApJ, 2024, 977(2), 166
2. Search for quasi-periodic oscillations in TESS light curves of bright Fermi Blazars, **Tripathi, Ashutosh**; Smith, Krista Lynne; Wiita, Paul J.; Wagoner, Robert, V, MNRAS, 2024, 528(4), 6608-6618
3. Optical quasi-periodic oscillations in the TESS light curves of three blazars, **Tripathi, Ashutosh**; Smith, Krista Lynne; Wiita, Paul J.; Wagoner, Robert, V, MNRAS, 2024, 527(3), 9132-9144
4. Testing the Kerr black hole hypothesis with the continuum-fitting and the iron line

methods: the case of GRS 1915+105, **Tripathi, Ashutosh**; Abdikamalov, Askar B.; Ayzenberg, Dmitry; Bambi, Cosimo; Grinberg, Victoria; Liu, Honghui; Zhou, Menglei, JCAP, 2022, 01, 019

5. Constraints on Einstein-Maxwell dilaton-axion gravity from X-ray reflection spectroscopy, **Tripathi, Ashutosh**; Zhou, Biao; Abdikamalov, Askar B.; Ayzenberg, Dmitry; Bambi, Cosimo, JCAP, 2021, 07, 002

6. Impact of the Disk Thickness on X-Ray Reflection Spectroscopy Measurements, **Tripathi, Ashutosh**; Abdikamalov, Askar B.; Ayzenberg, Dmitry; Bambi, Cosimo; Liu, Honghui, ApJ, 2021, 913(2), 129

7. Testing General Relativity with NuSTAR Data of Galactic Black Holes, **Tripathi, Ashutosh**; Zhang, Yuexin; Abdikamalov, Askar B.; Ayzenberg, Dmitry; Bambi, Cosimo; Jiang, Jiachen; Liu, Honghui; Zhou, Menglei, ApJ, 2021, 913(2), 79

8. Testing the Kerr Black Hole Hypothesis with GX 339-4 by a Combined Analysis of Its Thermal Spectrum and Reflection Features, **Tripathi, Ashutosh**; Abdikamalov, Askar B.; Ayzenberg, Dmitry; Bambi, Cosimo; Grinberg, Victoria; Zhou, Menglei, ApJ, 2021, 907(1), 31

9. Quasi-periodic oscillations in the long-term radio light curves of the blazar AO 0235+164, **Tripathi, Ashutosh**; Gupta, Alok C.; Aller, Margo F.; Wiita, Paul J.; Bambi, Cosimo; Aller, Hugh; Gu, Minfeng, MNRAS, 2021, 501(4), 5997–6006

10. Towards Precision Measurements of Accreting Black Holes Using X-Ray Reflection Spectroscopy, Bambi, Cosimo; Brenneman, Laura W.; Dauser, Thomas; Garcia, Javier A.; Grinberg, Victoria; Ingram, Adam; Jiang, Jiachen; Liu, Honghui; Lohfink, Anne M.; Marinucci, Andrea; Mastroserio, Guglielmo; Middei, Riccardo; Nampalliwar, Sourabh; Niedzwiecki, Andrzej; Steiner, James F.; **Tripathi, Ashutosh**; Zdziarski, Andrzej A., SSRv, 2021, 217(5), 65

11. Testing the Keplerian disk hypothesis using x-ray reflection spectroscopy, **Tripathi, Ashutosh**; Zhou, Biao; Abdikamalov, Askar B.; Ayzenberg, Dmitry; Bambi, Cosimo; Nampalliwar, Sourabh, PhRvD, 2020, 102(10), 103009

12. Impact of the reflection model on the estimate of the properties of accreting black holes, **Tripathi, Ashutosh**; Liu, Honghui; Bambi, Cosimo, MNRAS, 2020, 498(3), 3565-3577

13. Testing General Relativity with the Stellar-mass Black Hole in LMC X-1 Using the Continuum-fitting Method, **Tripathi, Ashutosh**; Zhou, Menglei; Abdikamalov, Askar B.; Ayzenberg, Dmitry; Bambi, Cosimo; Gou, Lijun; Grinberg, Victoria; Liu, Honghui; Steiner, James F., ApJ, 2020, 897(1), 84

14. Search for traversable wormholes in active galactic nuclei using x-ray data, **Tripathi, Ashutosh**; Zhou, Biao; Abdikamalov, Askar B.; Ayzenberg, Dmitry; Bambi, Cosimo, PhRvD,2020,101(6),064030
15. Toward Precision Tests of General Relativity with Black Hole X-Ray Reflection Spectroscopy, **Tripathi, Ashutosh**; Nampalliwar, Sourabh; Abdikamalov, Askar B.; Ayzenberg, Dmitry; Bambi, Cosimo; Dauser, Thomas; Garcia, Javier A.; Marinucci, Andrea, ApJ,2019,875(1),56
16. Constraining the Johannsen deformation parameter ϵ_3 with black hole x-ray data, **Tripathi, Ashutosh**; Abdikamalov, Askar B.; Ayzenberg, Dmitry; Bambi, Cosimo; Nampalliwar, Sourabh, PhRvD,2019,99(8),083001
17. Constraints on the Spacetime Metric around Seven “Bare” AGNs Using X-Ray Reflection Spectroscopy, **Tripathi, Ashutosh**; Yan, Jinli; Yang, Yuchan; Yan, Yunfeng; Garnham, Marcus; Yao, Yu; Li, Songcheng; Ding, Ziyu; Abdikamalov, Askar B.; Ayzenberg, Dmitry; Bambi, Cosimo; Dauser, Thomas; Garcia, Javier A.; Jiang, Jiachen; Nampalliwar, Sourabh, ApJ,2019,874(2),135
18. Intra-day variability of three Seyfert galaxies measured with XMM-Newton, **Tripathi, Ashutosh**; Wiita, Paul Joseph; Gupta, Alok Chandra; Gu, Min-Feng; Liao, Mai, RAA,2019,19(8),109
19. Testing the Kerr nature of the supermassive black hole in Ark 564, **Tripathi, Ashutosh**; Nampalliwar, Sourabh; Abdikamalov, Askar B.; Ayzenberg, Dmitry; Jiang, Jiachen; Bambi, Cosimo, PhRvD,2018,98(2),023018
20. Dark energy equation of state parameter and its evolution at low redshift, **Tripathi, Ashutosh**; Sangwan, Archana; Jassal, H. K., JCAP,2017(6),012