# Shubham Kala, Ph.D.

https://www.researchgate.net/profile/Shubham-Kala-4

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## **Employment History**

2022 – Present Assistant Professor, B. D. Govt. P. G. College, Jaiharikhal, Uttarakhand, India.

2021 –2022 Assistant Professor, Quantum University, Roorkee, Uttarakhand, India.

2019 – 2021 JRF, Department of Physics, GKV Haridwar sponsored by UCOST Dehradun.

## **Education**

Ph.D., Theoretical Physics: General Relativity and Classical Gravity, Gurukula Kangri (Deemed to be University), Haridwar, Uttarakhand.

Thesis title: Gravitational Lensing and Black Hole Shadows.

2015 – 2017 M.Sc. Physics, 75.80%, HNBGU (A Central University), Srinagar Garhwal.

2012 – 2015 B.Sc. PCM, 68.28%, HNBGU (A Central University), Srinagar Garhwal.

2011 – 2012 | Intermediat, 77.40%, Uttarakhand Board.

2009 – 2010 High School, 77.40%, Uttarakhand Board.

## **Skills**

Languages Strong reading, writing and speaking competencies for English and Hindi.

Programming C, MT<sub>E</sub>X

Scientific Softwares Maple, Mathematica.

Miscellaneous Academic research, teaching, Large typesetting and publishing.

## **Research Publications**

#### **Journal Articles**

- Kala, S., Nandan, H., & Sharma, P. (2022). Shadow and weak gravitational lensing of a rotating regular black hole in a non-minimally coupled Einstein-Yang-Mills theory in the presence of plasma. *Eur. Phys. J. Plus*, 137(4), 457. Odoi:10.1140/epjp/s13360-022-02634-6. arXiv: 2207.10717 [gr-qc]
- Kala, S., Nandan, H., Sharma, P., & Elmardi, M. (2021). Geodesics and bending of light around a BTZ black hole surrounded by quintessential matter. *Mod. Phys. Lett. A*, 36(31), 2150224.

  Odoi:10.1142/S0217732321502242. arXiv: 2109.14991 [gr-qc]
- Kala, S., Nandan, H., & Sharma, P. (2020). Deflection of Light Around a Rotating BTZ Black Hole. *Mod. Phys. Lett. A*, *35*(39), 2050323. *6* doi:10.1142/S021773232050323X. arXiv: 2010.16183 [gr-qc]
- 4 Kala, S., Saurabh, Nandan, H., & Sharma, P. (2020). Deflection of light and shadow cast by a dual-charged stringy black hole. *Int. J. Mod. Phys. A*, 35(28), 2050177. 6 doi:10.1142/S0217751X20501778. arXiv: 2010.03615 [gr-qc]

# Miscellaneous Experience

#### **Awards and Achievements**

- Young Scientist Award, for best poster presentation under the dicipline Physics at 13<sup>th</sup> Uttarak-hand State Science and Technology Congress 2018-19,held at UCOST, Vigyan Dham, Dehradun, during 26-28 februaury, 2019.
- Scholarship for Higher Education (SHE 2012-2017), DST INSPIRE, New Delhi.

### Paper presented in Seminars/Conferences/Workshops/Meetings

- Third International Conference titled "Vasudhev Kutumbkam" -3 organized by University of Delhi.
  - International Conference on Cosmology and Gravity (CosmoGrav22), organized by ICARD GK (DU) Haridwar.
- Gravitex 2021: International Conference on Gravitation: Theory and Experiment organized by University of KwaZulu Natal, South Africa.
  - 4th Shivalik, High Energy Physics, Cosmology and Astrophysics (HEPCATS) meeting organized by IIT Ropar.
- 2020 📕 14th Uttarakhand State Science and Technology Congress 2019-20,held at UCOST, Dehradun.
- National Conference on Recent Trends in the Study of Compact Objects: Theory and Observation (RETCO-IV), held at IUCAA, Pune.
  - 13th Uttarakhand State Science and Technology Congress 2018-19, held at UCOST, Dehradun.

### Participation in National/International Schools

- School on Black Holes and Gravitational Waves, Centre for String, Gravitation and Cosmology (CoE) organized by Department of Physics, IIT Madras during 17-22 January 2022 (online).
- Winter School in Astronomy, Astrophysics and cosmology held at Department of Physics, Guwahati University, Guwahati, during 7-13 January, 2019.

### Membership of Bodies/Organizations

- Reviewer in "American Journal of Astronomy and Astrophysics (AJAA)" ISSN Print: 2376-4678, ISSN Online: 2376-4686.
- Life time member of Indian Association for General Relativity and Gravitation (IAGRG), Pune,
- 2020 Member of All India Council For Technical Skill Development (AICTSD), India.
- 2018 Life time member of Indian Association of Physics Teachers (IAPT), Kanpur, India.

## References

#### Prof. Hemwati Nandan

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#### Prof. P. K. Raina

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