DR. PRATEEK SHARMA

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Department of Physics, Govt. P.G. College, Ranikhet, Almora, Uttarakhand, India

EDUCATION

Gurukula Kangri (Deemed to be University), Haridwar *2016 - 2021*
Ph.D.
Physics

Gurukula Kangri Vishwavidyalaya, Haridwar *2014-2016*
M.Sc. Percentage: 68.5%
Physics

Hemwati Nandan Bahuguna Garhwal University *2011-2014*
B.Sc. Percentage: 62.6%
Physics, Chemistry, Mathematics

COMPUTER EXPERTISE

Programming skills:
Python, Mathematica, Maple.

Applications:
LaTeX, LyX, spreadsheet and Presentation softwares.

Operating system:
Linux, Windows.

PARTICIPATION IN SEMINARS/CONFERENCES/WORKSHOPS/MEETINGS

1. 40th meeting of The Astronomical Society of India, hosted jointly by IIT Roorkee and ARIES Nainital, at IIT Roorkee, during 25-29 March 2022.

2. International Conference on Cosmology & Gravity (CosmoGrav22), hosted by IUCAA Center for Astronomy Research & Development (ICARD) and Gurukula Kangri (Deemed to be University), Haridwar, Uttarakhand, India, during March 23–24, 2022.

3. 4th SHIVALIK HEPCA TS MEETING, arranged online by the Gravity and String Theory group of IIT Ropar, Rupnagar, Punjab, from 31st July to 01st August 2021.

4. National Workshop on Artificial Neural Networks with MATLAB Implementation held at Gurukula Kangri Vishwavidyalaya, Haridwar, during 24-25 January, 2020.

5. Young Astronomers Meet 2019, held at Kodaikanal Solar Observatory, Kodaikanal, during 23-27 September, 2019.

6. 4th National Conference on Recent Trends in the Study of Compact Objects: Theory and Observation (RETCO-IV), held at IUCAA, Pune, during 17-20 April, 2019.

7. 30th Indian Association of General Relativity and Gravitation (IAGRG) meet held at BITS Pilani Hyderabad Campus, Hyderabad, during 3-5 January, 2019.

8. Workshop on Environmental Physics: Electronic Devices & Data Science held at Gurukula Kangri Vishwavidyalaya, Haridwar, during 29 September, 2018.

9. 12th Uttarakhand State Science and Technology Congress 2017-18,held at UCOST, Vigyan Dham, Dehradun, during 07-09 March, 2018.

10. XXXII Annual IAPT Convention 2017 and National Symposium on Recent Trends in Physics at Different Scales, held at Gurukula Kangri Vishwavidyalaya, Haridwar, during 29-31 October, 2017.

11. Second National Conference on Radiation Awarness and Detection in Natural Environment held at Gurukula Kangri Vishwavidyalaya, Haridwar, during 25-27 September, 2017.

12. Workshop and Hands on Activities It's A Materials World held at Department of Physics, Gurukula Kangri Vishwavidyalaya, Haridwar on 24 December 2016.

13. National Workshop on Gravitational Wave Astronomy held at Department of Physics, Dibrugarh University, Dibrugarh, during 2-4 November 2016.

14. Workshop on Low Cost Experiments and Hands on Training in Physics held at Department of Physics, Gurukula Kangri Vishwavidyalaya, Haridwar during 19-20 September 2016.

15. Workshop and Hands on Training on Synthesis and Characterization of Thin Films held at Department of Physics, Gurukula Kangri Vishwavidyalaya, Haridwar during 31 March - 1 April 2015.

PARTICIPATION IN NATIONAL/INTERNATIONAL SCHOOLS

1. Winter School in Astronomy, Astrophysics and Cosmology (WSAAC) held at Gauhati University, Guwahati during 7-13 January, 2019.

2. SERB Preparatory School in Theoretical High Energy Physics held at University of Hyderabad, Hyderabad from August 20-September 15, 2018.

AWARDS AND FELLOWSHIP

1. Young Scientist Award for best poster presentation under the dicipline Physics at 12th Uttarakhand State Science and Technology Congress 2017-18,held at UCOST, Vigyan Dham, Dehradun, during 07-09 March, 2018.

2. First prize for poster presentation in XXXII Annual IAPT Convention 2017 and National Symposium on Recent Trends in Physics at Different Scales, held at Gurukula Kangri Vishwavidyalaya, Haridwar, during

29-31 October, 2017.

3. Junior Research Fellow in SERB project entitled Null Geodesics Around Strong Gravitational Sources at Department of Physics, Gurukula Kangri (Deemed to be University), Haridwar.

LIST OF PUBLICATIONS

(A) Research Papers Published in Peer Reviewed International Journals:

1. Shubham Kala, Hemwati Nandan, Prateek Sharma,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 (2022).

2. Prateek Sharma, Hemwati Nandan, Gamal Gergess Lamee Nashed, Amare Abebe, Geodesics of a Static Charged Black Hole Spacetime in f (R) Gravity, Symmetry 14 2, 309 (2022).

3. Shubham Kala, Hemwati Nandan, Prateek Sharma, Maye Elmardi, Geodesics and bending of light around a BTZ black hole surrounded by quintessential matter. Modern Physics Letters A Vol. 36, No. 31 , 2150224 (2021).

4. Prateek Sharma, Hemwati Nandan, Uma Papnoi, Arindam Kumar Chatterjee, Optical and thermodynamic properties of a rotating dyonic black hole spacetime in $\mathcal{N} = 2$, $U(1)^2$, gauged supergravity. The European Physical Journal C, 81(5), 1-8 (2021).

5. Shubham Kala, Hemwati Nandan, Prateek Sharma, Deflection of Light Around a Rotating BTZ Black Hole, Modern Physics Letters A 35, No. 39, 2050323 (2020).

6. Shubham Kala, Saurabh, Hemwati Nandan, Prateek Sharma, Deflection of Light and Shadow Cast by a Dual Charged Stringy Black Hole,International Journal of Modern Physics A Vol. 35, No. 26 2050155 (2020).

7. Prateek Sharma, Hemwati Nandan, Radouane Gannouji, Rashmi Uniyal, Amare Abebe, Deflection of Light by a Rotating Black Hole Surrounded by "Quintessence", International Journal of Modern Physics A Vol. 35, No. 26 2050155 (2020).

(B) Research Papers Published in Refereed Proceedings:

1. Hemwati Nandan, Prateek Sharma, Rashmi Uniyal , Philippe Jetzer, Geodesics in a rotating black hole spacetime surrounded by quintessence,The Fifteenth Marcel Grossmann Meeting, pp. 849-854 (2022), https://doi.org/10.1142/9789811258251_0114.

MEMBERSHIP OF BODIES/ORGANIZATIONS

1. Life time member of Indian Association of Physics Teachers (IAPT), Kanpur, India.
2. Life time member of Indian Association for General Relativity and Gravitation (IAGRG), Pune, India.