



## Faculty Details Performa Web-site

Title	Dr.	First Name	Shobhit	Last Name	Giri	Photograph
Designation	Assistant Professor					
Address	Swami Vivekanand Marg Lane-18, Gulzar Farm Khadri Shyampur, P.O. Satyanarayan Temple, Rishikesh-249204, Dehradun, Uttarakhand					
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<b>Educational Qualifications</b>						
<b>Degree</b>	<b>College/Department</b>				<b>Year</b>	
Ph. D. (Physics)	Gurukula Kangri (Deemed to be University) Haridwar, Uttarakhand				2022	
M. Sc. (Physics)	H.N.B. Garhwal University (Central University)				2016	
B. Sc.	H.N.B. Garhwal University (Central University)				2014	
Intermediate	Uttarakhand Board				2011	
High School	Uttarakhand Board				2009	
<b>Areas of Research Interest/Specialization</b>						
Theoretical Astrophysics General Relativity Compact Objects Nonlinear Dynamics and Chaos						
<b>Subjects Teaching</b>						
Mathematical Physics-I, Heat & Thermodynamics, Nuclear and Particle Physics, Mechanics Lab, Digital, Analog and Instrumentation Lab, Atmospheric Physics Lab.						
<b>List of Publications</b>						

1. Chaos motion and Periastron precession of spinning test particles moving in the vicinage of a Schwarzschild black hole surrounded by a quintessence matter field *The European Physical Journal Plus* 138:245 (2023) [ISSN: 2190-5444] [IF: 3.911] (SCI-Indexed).
2. Stability analysis of circular orbits around a traversable wormhole with massless conformally coupled scalar field, *The European Physical Journal C* 82:298, (2022) [ISSN: 1434-6044 (print); 1434-6052 (web)] [IF: 4.991] (SCI-Indexed).
3. Geodesic stability and quasinormal modes of non-commutative Schwarzschild black hole employing Lyapunov exponent *The European Physical Journal Plus* 137:181, (2022) [ISSN: 2190-5444] [IF: 3.911] (SCI-Indexed).
4. Stability analysis of circular orbits around a charged BTZ black hole spacetime in a nonlinear electrodynamics model via Lyapunov exponents, *Modern Physics Letters A* 36, 2150220, (2021) [ISSN: 0217-7323 (print), 1793-6632 (online)] [IF: 2.066] (SCI-Indexed).
5. Stability analysis of geodesics and quasinormal modes of a dual stringy black hole via Lyapunov exponents, *General Relativity and Gravitation* 53 (8), (2021) [ISSNs: 0001-7701 (print), 1572-9532 (online)] [IF: 2.84] (SCI-Indexed).
6. Stability of circular geodesics in equatorial plane of Kerr spacetime, *The European Physical Journal Plus* 137:263, (2022) [ISSN: 2190-5444] [IF: 3.911] (SCI-Indexed).
7. Geodesics of a Static Charged Black Hole Spacetime in  $f(R)$  Gravity *Symmetry*, 14, 309; (2022) [ISSN: 2073-8994] [IF: 2.940] (SCI-Indexed).

#### **Awards/Fellowships/Honours/Examinations Qualified**

1. **National Eligibility Test (NET with JRF)** June-2017 (AIR- 116) conducted by Joint CSIR-UGC, New Delhi, India.
2. **Graduate Aptitude Test in Engineering (GATE-2017)** with AIR- 702.
3. **Joint Entrance Screening Test (JEST-2017)** with AIR- 120.
4. **Graduate Aptitude Test in Engineering (GATE-2018)** with AIR- 2273.
5. **DST-INSPIRE Fellowship-2017** by Department of Science & Technology (DST) Govt. of India for Doctoral Programme in Science and Technology.
6. **INSPIRE Scholarship** for Higher Education (SHE) by Department of Science & Technology (DST) Govt. of India during B.Sc. and M.Sc.
7. **Young Scientist Award-2020** by Uttarakhand State Council for Science & Technology (UCOST), Dehradun during 14th USSTC 2020.
8. **Emerging Scientist Award-2021** in International Conference for award winners on Engineering, Science and Medicine, organized by VDGGOOD Professional Association, Chennai, India.

#### **Membership of Bodies/Organizations**

1. Lifetime Member of Indian Association of Physics Teachers (IAPT), Kanpur, India with Life Membership No. 11686L7675.
2. Lifetime Member of Indian Association of General Relativity and Gravitation (IAGRG), IUCAA Pune, India.
3. Member of All India Council Technical Skill Development, India.

## Participation in Conferences/Seminars/Workshops

1. Presented a paper entitled "Stability of circular orbits around a charged BTZ black hole spacetime in a nonlinear electrodynamics model" in International Conference on Cosmology & Gravity (CosmoGrav22) organized by IUCAA Center for Astronomy Research Development (ICARD), Gurukula Kangri (Deemed to be University) Haridwar.
2. Participated in one week "National Workshop on Methodology, Publication Ethics (RMPE-2022)" organized by Physics Department IQAC, Gurukula Kangri (Deemed to be University) Haridwar in collaboration with USERC Dehradun.
3. Participated in "International Seminar on Astrophysics and Cosmology" Organized by IUCAA Centre for Astronomy Research and Development (ICARD), Physics Department, North Bengal University.
4. Participated in "ONLINE WORKSHOP ON HIGH PERFORMANCE COMPUTING FOR ASTROPHYSICS AND ASTRONOMY" Conducted by SKA-India Consortium and Indian Institute of Technology Kharagpur.
5. Presented a paper entitled "The Geodesics Stability and Quasinormal Modes of a Non-Commutative Schwarzschild Black Hole by Employing Lyapunov Exponent" in Gravitex 2021: International Conference on Gravitation: Theory and Experiment organized by the Astrophysics Research Centre, University of KwaZulu Natal, South Africa.
6. Presented a paper entitled "Stability of Circular Geodesics and Quasinormal Modes Around a Dual Stringy Black Hole Spacetime" in 4 th SHIVALIK HEPCATS MEETING organized by the Gravity and String Theory group of IIT Ropar, Rupnagar, Punjab, India.
7. Presented a paper entitled "Stability Analysis of Geodesics and Quasinormal Modes of Electrically Charged Stringy Black Hole via Lyapunov Exponent" in conference on Advances in Theoretical Physics, Material and Atmospheric Science organized by Department of Physics, VSKC Govt. P.G. College Dakpathar, Dehradun, Uttarakhand, India.
8. Presented a paper entitled "Motion of Spinning Test Particles around Schwarzschild Black Hole Surrounded by Quintessence" in 14 th Uttarakhand State Science and Technology Congress (USSTC- 2020) held at Uttarakhand State Council for Science & Technology (UCOST), Vigyan Dham, Dehradun, Uttarakhand.
9. Participated in the course "Advanced Course on Special Theory of Relativity" organized by Centre for Continuing Education, Indian Institute of Technology (IIT) Kanpur during January 26 to May 19, 2020
10. Participated in two days National Workshop on "Artificial Neural Network with MATLAB Implementation" organized by Department of Computer Science, Gurukula Kangri Vishwavidyalaya, Haridwar.
11. Attended five days "International Workshop on Astrophysics and Cosmology" organized by International Center for Cosmology (ICC), Charotar University of Science and Technology, Gujrat.
12. Participated in the course "Basics of Quantum Mechanics" organized by Centre for Continuing Education, Indian Institute of Technology (IIT) Kanpur.
13. Participated in "An Educator Workshop in Astronomy & SkyWatch" sponsored by ARIES, Nainital (DST, Govt. of India) organized by IUCAA Centre for Astronomy Research & Development, Department of Physics, Gurukula Kangri Vishwavidyalaya, Haridwar.
14. Participated in XXXII Annual IAPT Convention and National Symposium on Recent Trends in Physics at Different Scales held at Department of Physics, Gurukula Kangri Vishwavidyalaya, Haridwar.
15. Participated in Second National Conference on Radiation Awareness sand Detection in

Natural Environment (RADNET-II) held at Department of Physics, Gurukula Kangri Vishwavidyalaya, Haridwar.

**16.** Participated in Seminar on "Light & Light Based Technologies (SLT-2016)" organized by Optical Society of India (Dehradun Local Chapter) & Doon University, Dehradun, Uttarakhand.

**17.** Participated in one day workshop on "Electronic Components: Identification, Testing and Applications" held at Department of Physics, Pt. L.M.S. Govt. P.G. College, Rishikesh Sponsored by Indian Association of Physics Teachers (IAPT).

**18.** Participated in "National Graduate Physics Examination 2011-2012 (B.Sc. Level)" organized by Indian Association of Physics Teachers (IAPT) held at Pt. L.M.S. Govt. P.G. College, Rishikesh.

