

<b>Title</b>	Dr.	<b>First Name</b>	Ritika	<b>Last Name</b>	Nagpal	<b>Photograph</b>
<b>Designation</b>						
<b>Address (Campus)</b>						
<b>(Residence)</b>	6648-3rd Floor, East Rohtash Nagar, Shahdara, Delhi-110032					
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<b>Educational Qualifications</b>	Ph.D.					
<b>Degree</b>	<b>Institution</b>			<b>Year</b>		
Ph.D.	NSUT (formerly NSIT, University of Delhi)			2019		
M.Sc.	Hansraj College, DU			2014		
B.Sc.	Vivekananda College, DU			2012		
<b>Career Profile</b>						
<b>Designation</b>	Assistant Professor			<b>Duration</b>	24/08/2019 to Present	
<b>Administrative Assignments</b>						
<ul style="list-style-type: none"> <li>External Examiner in various colleges of Delhi University</li> <li>Paper and syllabus setting for various Delhi University examinations</li> <li>Worked in various committees of the college, viz., IQAC, NIRF, ALUMNI Committee</li> </ul>						
<b>Subjects Taught</b>						
Complex Analysis, Biomathematics, GE Math, Discrete Mathematics, CAS, Analytic Geometry and Applied Algebra, Probability and Statistics (using Excel), Numerical Methods & Programming (using Mathematica software)						
<b>Research Guidance: NA</b>						
<b>Publications profile:</b>						
<ol style="list-style-type: none"> <li><b>Ritika Nagpal</b>, Shibesh Kumar Jas Pacif, Abhishek Parida, Reconstructing cosmic evolution with a density parametrization Mod. Phys. Lett. 37 18 (2022), ISSN (print): 0217-7323   ISSN (online): 1793-6632 (<b>Impact factor: 2.006</b>)</li> </ol>						

2. **Ritika Nagpal**, Shibesh Kumar Jas Pacif, Cosmological aspects of  $f(R, T)$  gravity in a simple model with a parametrization of  $q$ , Eur.Phys. J. Plus 136 (8) 875 (2021) (**Impact factor: 3.911**)
3. J. K. Singh, **Ritika Nagpal**, FLRW cosmology with EDSFD parametrization, Eur. Phys. J. C 80 (4), 295 (2020) (**Impact factor: 5.172**) ISSN/ISBN 1434-6044(P) 1434-6052(O)
4. **Ritika Nagpal**, J. K. Singh, A Beesham, Hamid Shabani, Cosmological aspects of a hyperbolic solution in  $f(R, T)$  gravity, Annals Phys. 405, 234-255 (2019) (**Impact factor: 2.267**) ISSN/ISBN 0003-4916
5. **Ritika Nagpal**, S. K. J. Pacif, J. K. Singh, K. Bamba, A Beesham, Analysis with observational constraints in  $\Lambda$ -cosmology in  $f(R, T)$  gravity, Eur. Phys. J. C 78 (11) 946 (2018) (**Impact factor: 5.172**) ISSN/ISBN 1434-6044(P) 1434-6052(O)
6. J. K. Singh, Kazuharu Bamba, **Ritika Nagpal**, S. K. J. Pacif, Bouncing cosmology in  $f(R, T)$  gravity, Phys. Rev. D 97 123536 (2018) (**Impact factor: 4.506**) ISSN/ISBN 2470-0010 (P) 2470-0029(O)
7. **Ritika Nagpal**, J.K. Singh, S. Aygun, FLRW cosmological models with quark and strange quark matters in  $f(R, T)$  gravity, Astrophys. Space Sci. 363 (6) (2018) (**Impact factor: 1.622**) ISSN/ISBN 0004-640X(P) 1572-946X(O)
8. J. K. Singh, **Ritika Nagpal**, S. K. J. Pacif, Statefinder diagnostic for modified Chaplygin gas cosmology in  $f(R, T)$  gravity with particle creation, Int. J. Geom. Meth. Mod. Phys. 15 (3), 1850049 (2017) (**Impact factor: 1.068**) ISSN/ISBN 0219-8878 (P) 1793-6977(O)

#### Conference organization/Presentations (in the last three years):

- Attended a two-day Indo-South Africa workshop on “Gravitation and Cosmology”, held at Centre for Theoretical Physics, Jamia Millia Islamia, during December 3-4, 2018.
- Participated in an International Conference “International Conference on Recent Advances in Pure and Applied Mathematics” held in Department of Mathematics, Delhi Technological University during October 23-25, 2018.
- Presented a poster in an “Indian Association for General Relativity and Gravitation (IAGRG)”, organized by Dept. of Physics, BITS-Pilani, Hyderabad Campus, during January 3-5, 2019.
- Presented a paper entitled “Study on FLRW cosmology with observational interpretation using a specific form of energy density of scalar field” in an international conference on Gravitation, Cosmology & Mathematical physics organized at the Department of Mathematics, GLA University, Mathura, during April 4-7, 2019.
- Participated in a three-week webinar entitled “Introduction to computer algebra system: Maxima” held by “Student learning centre IQAC, Hansraj College, University of Delhi”, during June 27, 2020 – July 18, 2020.
- Participated in a one-week online workshop entitled “Data Manipulation and Visualization

through Statistical Software R” organised by “Zakir Hussain College, University of Delhi” during July 27, 2020 – July 31, 2020

- Participated in a one-week Faculty Development Program entitled “Microsoft Tools for Creating Effective Teaching and learning environment” organised by “Vivekananda College, University of Delhi” during June 7, 2021 – June 13, 2021.
- Participated in a one-week Faculty Development Program entitled “Mathematical Analysis and its Applications” organised by “Vivekananda College, University of Delhi” during July 26, 2021 – July 31, 2021.
- Participated in a one-week online Faculty Development Program entitled “Basic IT tools, Advanced Spreadsheet Tools and Statistical Software Package with SPSS” organised by “University of Delhi and Guru angad Dev Teaching learning centre, SGTB Khalsa College” during October 27<sup>th</sup> , 2022 – November 3<sup>rd</sup> , 2022.

### **Research Projects (Major Grants/Research Collaboration)**

#### **Awards and Distinctions:**

- Qualified NET exam (Mathematical Sciences) in December 2015, with AIR 28
- Working as a Teaching cum Research Fellow (TRF) at Netaji Subhas University of Technology, (Formerly NSIT, Faculty of Technology, University of Delhi), from July 20, 2015, to 31st May 2019
- Received awards for having secured Highest Marks in Vivekanand College in B.Sc. Mathematics (1st, 2nd, 3rd year)
  - Received a cash prize of Rs 10,000/- release of grant-in-aid for Meritorious Students studying in Government funded colleges during the academic year 2012-2013
- Received a cash prize of Rs 1450/- being “The Geetika Nagpal Khurana Scholarship Award” for having secured Highest Marks in B.Sc. 2nd year, for the academic year 2011-2012

#### **Other Activities**