

# Dr. Rohit Gupta

## Curriculum Vitae

Physics Department, KNGPG College  
Gyanpur, Bhadohi-221304  
Uttar Pradesh, India  
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### Personal Details

Date of Birth **December 6, 1991**, City of Birth: Agra, Country of Birth: India.  
Citizenship **Indian**, Country of Residence: India.  
Gender **Male**.  
Marital Status **Single**.  
e-mail id **ph15049@iisermohali.ac.in, rohitg876@gmail.com**.

### Employment Details

July 2024-present **Assistant Professor**, Kashi Naresh Government PG College, Gyanpur.  
Directorate of Higher Education, Government of Uttar Pradesh  
Nov 2021-June 2024 **Assistant Professor**, SMPGGDC, Ballia.  
Directorate of Higher Education, Government of Uttar Pradesh

### Education

June 2022 **PhD in Physics**, Indian Institute of Science Education and Research, Mohali.  
July 2015 **M.Sc. in Physics**, Indian Institute of Technology, Indore.  
CGPA: 8.24 out of 10  
June 2013 **B.Sc. Physical Sciences**, Hindu College, University of Delhi.  
Percentage: 78.4%  
2010 **All India Senior School Certificate Examination (Class 12)**, C.B.S.E..  
Percentage: 84.67%  
2008 **All India Secondary School Examination (Class 10)**, C.B.S.E..  
Percentage: 84.6%

### Projects

August 2014-May 2015 **M.Sc. Dissertation**, Indian Institute of Technology (IIT) Indore.  
Phenomenology of Dark Matter based on Inert Higgs Doublet Model under the supervision of Prof. Subhendu Rakshit  
May 2014 **Summer Project**, Inter University Centre for Astronomy and Astrophysics(IUCAA).  
Study of evolution of Universe for different cosmological model and Standard Model of Cosmology under supervision of Prof. Tarun Souradeep.

### National level exam

2015, 2018 **GATE Physics**, (Indian Institute of Technology- Graduate Aptitude Test in Engineering).  
All India Rank-105 Percentile-98.6 (2015), All India Rank-99 Percentile-99.3 (2018)

- 2015 **JEST**, (*Joint Entrance Screening Test*).  
All India Rank-310 Percentile-93.27
- 2015 **CSIR-JRF**, (*Council of Scientific and Industrial Research- Junior Research Fellow exam*).  
All India Rank-130
- 2013 **IIT-JAM**, (*Indian Institute of Technology -Joint Admission Test for M.Sc.*).  
All India Rank-227

## Skill sets

- Publishing Tools  $\text{\LaTeX}$ , MS-Office
- Programming language C/C++, Python
- Tools ROOT , Mathematica, Octave

## Schools and Workshops

- Nov 2020-Feb 2021 **HPC Shiksha**, NSM & CDAC, Online mode.  
Basics of High Performance Computing (including modules on OpenMP, MPI and CUDA)
- August 2020 **HCPSS 2020**, Fermilab, Chicago, Online mode.  
Fermilab-CERN Hadron Collider Physics Summer School
- July 2020 **JETSCAPE 2020**, University of Tennessee, Knoxville, Online mode.  
JETSCAPE online summer school 2020
- May 2014 **ISSAA**, IUCAA, Pune.  
Introductory Summer School on Astronomy and Astrophysics

## Presentations

- Jan 2021 **Poster presentation**, *Initial Stages*, Weizmann Institute of Science, Israel, (Online mode).  
A comparison of thermodynamical properties in high multiplicity pp and heavy ion collision
- Dec 2020 **Oral Presentation**, *DAE-BRNS HEP Symposium*, NISER, India, (Online mode).  
A unified formalism to study soft as well as hard part of the transverse momentum spectra
- Aug 2020 **Poster Presentation/Flash Talk**, *ICHEP*, Prague, Czech Republic, (Online mode).  
A generalized approach to study low as well as the high pT regime of transverse momentum spectra
- Aug 2020 **Poster Presentation**, *SSI 2020*, Stanford University, U.S.A, (Online mode).  
A generalized approach to study low as well as the high pT regime of transverse momentum spectra
- Feb 29 2020 **Oral Presentation**, *Scholar Day*, IISER Mohali, India.  
Generalization of Non-extensivity in ultrarelativistic collision
- Dec 13 2017 **Oral Presentation**, *Scholar Day*, IISER Mohali, India.  
Constraining Parton Distribution Function using W charge asymmetry data
- May 31 2014 **Poster presentation**, *IUCAA, Pune, India*.  
Evolution of Universe for different cosmological model

## Online Courses

- April 2020 **Neural Networks and Deep Learning**, *deeplearning.ai*, Coursera.
- April 2020 **Structuring Machine Learning Projects**, *deeplearning.ai*, Coursera.
- April 2020 **Understanding Financial Markets**, *University of Geneva*, Coursera.

- January 2020 **Improving Deep Neural Networks: Hyperparameter tuning, Regularization and Optimization**, *deeplearning.ai*, Coursera.
- October 2019 **Machine Learning**, *Stanford University*, Coursera.
- Sept 2019 **Data Science Course**, *365 Careers*, Udemy.

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## Publication

**Shubhangi Jain, Rohit Gupta & Satyajit Jena**, *Study of isothermal compressibility and speed of sound in matter formed in heavy-ion collision using unified formalism*, Universe 9 (2023) 4, 170.

**Rohit Gupta, Anjaly Menon, Shubhangi Jain & Satyajit Jena**, *The Theoretical Description of the Transverse Momentum Spectra: A Unified Model*, Universe 9 (2023) 2, 111.

**Rohit Gupta & Satyajit Jena**, *Model comparison of the transverse momentum spectra of charged hadrons produced in PbPb collision at  $\sqrt{s_{NN}} = 5.02$  TeV*, Adv.High Energy Phys. 2022 (2022) 5482034.

**Rohit Gupta, Aman Singh Katariya & Satyajit Jena**, *A unified formalism to study the pseudorapidity spectra in heavy-ion collision*, Eur.Phys.J.A 57 (2021) 7, 224.

**Satyajit Jena & Rohit Gupta**, *A unified formalism to study transverse momentum spectra in heavy-ion collision*, Phys.Lett.B 807 (2020) 135551.

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## Referee

Dr. Satyajit Jena

(Ph.D. Thesis Supervisor)

**Associate Professor**, *Department of Physics*, IISER, Mohali.

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