

Lav Kumar Singh, Ph.D.

 lavksingh@hotmail.com

 +91 8448746990

 www.researchgate.net/profile/Lav-Kumar-Singh

https://arxiv.org/a/kumar_l_2.html



Employment History

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| 01.04.2025-present |  Assistant with a doctoral degree (Post-doctoral) , Institute of Mathematics, Physics and Mechanics (IMFM), Ljubljana (Slovenia). |
| 01.07.2024 – 31.03.2025 |  Teaching Assistant , Madhav Institute of Technology and Science- Gwalior (M.P) India. |
| 13.03.2023 – 30.06.2024 |  Post-Doc Fellow , Indian Institute of Science Education and Research, Bhopal (M.P). |
| 23.12.2022 – 28.02.2023 |  Research Associate , Indian Institute of Technology, Hyderabad (Telangana). |
| 25.07.2022 – 24.10.2022 |  Research Associate , Indian Institute of Technology, Gandhinagar (Gujrat). |

Education

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| 2017 – 2022 |  Ph.D, Jawaharlal Nehru University
Thesis title: <i>On Arens Regularity of the projective tensor product of Schatten spaces.</i> |
| 2014 – 2016 |  M.Sc. Mathematics, Dr. Harisingh Gour Central University, Sagar (M.P) .
Grades (Percentage): 60% |
| 2009 – 2012 |  B.Sc. Honors Mathematics, Banaras Hindu University, Varanasi .
CGPA: 6.10 |

Research Publications

-  L.K Singh, A. Peperko **Sherman-Takeda theorem for Fréchet locally C^* -algebras**, Arxiv (communicated).
-  L.K Singh, A. Peperko, **Some Frechet spaces associated to Young functions satisfying Mulholland's inequality**. To appear in Filomat.
-  L.K Singh, **Geometry of a Banach algebra \mathcal{A} and the bidual of $L^1(G, \mathcal{A})$** , Journal of mathematical analysis and applications, Volume 533, Issue 1, 128056. 2024.
-  L.K Singh, **Annihilators in the bidual of generalized group algebras**, Complex analysis and operator theory. Vol. 18, 68, 2024
-  V.P Gupta, L.K Singh, **On strong Arens irregularity of the projective tensor product of Hilbert-Schmidt spaces**, Houston J. Math., Vol 48-2, 337-351. 2022.
-  L.K Singh, **On Arens regularity of projective tensor products of Schatten spaces**, Rocky Mount. J. Math. Vol. 51, issue 4, 1433-1441. 2021.
-  L.K Singh, A.K Verma, **Some functorial properties of Schatten classes**. Adv. Oper. Theory 5, 1406–1413 (2020).

Conferences and Invited Talks

- Contributory talk at SWOT-2025, University of Agriculture, Krakow (Poland). 21-24 July, 2025.
- IWOTA-2025, University of Twente, Enschede (Netherlands) 14-18 July, 2025.
- Contributory talk- International workshop on Operator theory and its Applications (IWOTA-2024)- University of Kent, Canterbury (U.K) (12-16 August, 2024).
- National conference on Operator theory and function spaces- Shiv Nadar Institute of Eminence (Attended 27-29 March, 2024).
- Indian Women in Mathematics conference- IISER Bhopal. (Attended 13 July-15 July, 2023)
- Invited as a short-term visiting scholar at department of mathematics IIT-Kanpur. (21 Nov-05 Dec)
- International conference on recent trends in mathematics, Hansraj college . Presented a paper. (22-24 Dec 2021, Online)
- Conference on algebra and analysis, Ambedkar University. Presented a paper. (23, April 2021, Online).
- Advanced instructional school in operator theory, IIT-Kanpur . (12 dec-28 dec, 2019)
- National workshop in functional analysis and topology, LNMIIT Jaipur. (March 2018)
- Annual foundation school-III, Kerala school of mathematics, Kozhikode.(July 2018)
- Annual foundation school-I, IIT-delhi. (December 2017)
- Summer research program, IISER-Mohali. Worked under guidance of Prof. I.B.S Passi and learned tropical algebras. (May 2013)

Teaching

2024-2025  Instructor/Lecturer at MITS- Gwalior for B.Tech course

- Research Methodology (PhD Coursework)
- M3: Engineering Mathematics-3 (B.Tech semester-IV)
- Linear Algebra (B.Tech Semester I)
- M2: Engineering Mathematics-2 (B.Tech semester-III)

2023-2024  Teaching Assistant for BS courses at IISER-Bhopal.

- MTH 101: Linear Algebra (Summer)
- MTH 201: Probability and Statistics (Winter)

2019-2020  Teaching Assistant for M.Sc courses at Jawaharlal Nehru University.

- Complex Analysis (Summer)
- Functional analysis (Winter)

2018-2019  Teaching Assistant for B.Tech courses at Jawaharlal Nehru University, New Delhi.

- Engineering Mathematics- 1 (Summer)
- Engineering Mathematics- 2 (Winter)

Skills

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| Languages | ■ Strong reading, writing and speaking competencies for English and Hindi. |
| Coding | ■ Matlab, L ^A T _E X. |
| Misc. | ■ Academic research, teaching, training, consultation, L ^A T _E X typesetting and publishing. |

Miscellaneous Experience

Awards and Achievements

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| 2024 | ■ SERB International Travel Support , granted by Science and engineerign research board (Govt. of India) for presenting paper in IWOTA-2024, University of Kent, Cantebrury (U.K) |
| 2017 | ■ CSIR-JRF , Fellowship granted by CSIR for pursuing PhD in Mathematics. |

Certification

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| 2016 | ■ CSIR-NET for lecturership in Mathematical Sciences . Awarded by Council for Scientific and Industrial research (Government of India). |
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