

Mehak Sharma

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RESEARCH INTERESTS

Operators induced by holomorphic maps on spaces of analytic functions. The idea is to relate the complex function theory with the properties of the operators induced by holomorphic maps.

EDUCATION

Ph.D.,Mathematics(awardedonDecember13,2022). **Central University of Jammu**,Jammu,INDIA, *Department of Mathematics*

- Thesis title: “**Operators induced by holomorphic maps between Hardy and Bergman type classes**”
- Advisor: Dr. Ajay K. Sharma

M.Sc., 2016 (**71.35%**) **University of Jammu**,
Jammu, J& K, INDIA

B.Sc,2013(**70.84%**) **Govt. College for Women**,
GandhiNagar, Jammu, J&K, INDIA

FELLOWSHIPS

- **JRF** in Research Project entitled “**Difference of composition operators between some spaces of holomorphic functions**” funded by **NBHM**,Department of Atomic Energy, Govt.of India during Jan 2019 to Jan 2022.
- Awarded **NBHM Post doctoral fellowship 2023**.

RESEARCH ARTICLES IN JOURNALS

- Semigroups of compositions operators on vector valued Hardy spaces of the upper half plane. **Numer. Funct. Anal. Optim.** 43(2022),no. 7, 876–885.(jointly with AK Sharma and M.Mursaleen) (**SCI,IF:1.4**)
- On double difference of composition operators from a space generated by the Cauchy kernel and a special measure. **Azerb.J.Math.**11(2021),no.2, 125–136 (jointly with AK Sharma and M.Mursaleen) (**ESCI&Scopus indexed**)
- On order bounded difference of weighted composition operators between Hardy spaces. **Complex Anal. Oper. Theory**13(2019),no.5, 2191–2201 (jointly with AK Sharma)(**SCI, IF:0.8**)

- Composition operators on the Dirichlet space of the upper half-plane. **New York J. Math.** 25(2019), 198–206. (jointly with AK Sharma and K.Raj). **(SCI, IF: 0.637)**
- Weighted composition operators from the Kim class and the Smirnov class to weighted Bloch type spaces. **Commun. Korean Math. Soc.** 33(2018), no. 4, 1171–1180. (jointly with AK Sharma and E. Subardarsini). **(ESCI & Scopus indexed)**
- Essential norm of difference of composition operators from weighted Bergman spaces to Bloch-type spaces. **J. Funct. Spaces** 2018, Art. ID 4670904, 7 pp. (jointly with AK Sharma and R. Krishan) **(SCI, IF: 1.281)**

WORKSHOPS
ATTENDED

- Workshop on “Introduction To LATEX”, **Central University of Jammu**, 25th to 27th February, 2022.
- Short term training program for teachers on “Numerical Linear Algebra & Optimization Techniques In Engineering”, **NIT Meghalaya**, 15th to 19th March 2022.
- Five days national level “Workshop on Functional Analysis and Numerical Analysis” (WFANA – 2021), **National Institute of Technology Tiruchirappalli**, 05 – 09 April 2021.
- Two-day International Webinar on Algebra, Analysis & Topology, **Bankura University**, 13th -14th August 2020.

PAPER
PRESENTED

- Presented a paper entitled “A characterization of compact composition operator from Dirichlet space of the half plane” in International Conference on Mathematical Analysis & Applications organised by the Department of Mathematical Sciences, **Baba Ghulam Shah Badshah University** Rajouri, w.e.f. March 30, 2022 to March 31, 2022.
- Presenting paper as a Contributory speaker on the topic entitled “Order bounded difference of composition operators” on **ICAA_NEPAL_2021** organized by Nepal Mathematical Society (NMS) from April 9 – 11, 2021.
- Presented a paper entitled “Composition Operators on the Dirichlet Space of the Upper Half-Plane” in National Conference on Pure & Applied Mathematics organized by Department of Mathematics, **National Institute of Technology Manipur**, Langol, Imphal during 6th March 2021 to 7th March 2021.

CONFERENCES
ATTENDED

- International conference on Frontiers of Space Technology and Applications for Humanity”organized by **CentralUniversity of Jammu**,Samba in Collaboration with IndianInstitute of Space Science and Technology(IIST),Thiruvananthapuram during March 12-13, 2022.
- 35th Annual Conference of the Ramanujan Mathematical Society during 28-30th December, 2020 at the Department of Mathematics, **Central University of Rajasthan**.

TEACHING

Teaching Philosophy

My teaching philosophy is strongly influenced by the good teachers I have learnt from. During lecture I feel the environment should be friendly and questions should be encouraged. Every lecture should begin with the motivation for the results to be discussed by means of an example and then the formal proof should be presented with all the details. The lecture should end with a brief summary. Every lecture should be complimented with a set of exercises to enhance the understanding. I feel that from a course every student should take back something and most of them should be interested to know more. I feel that the lectures should be enjoyable to the teacher and students.

MehakSharma

