Dr. ARUN KAJLA
Assistant Professor
Department of Mathematics
School of Basic Sciences
Central University of Haryana,
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Academic Qualification:

- Ph. D in Mathematics from I.I.T. Roorkee, Roorkee in year 2016 on the topic "Rate of convergence of certain positive linear approximation methods".
- Cleared CSIR-UGC-NET (JRF) in June 2012.
- Cleared CSIR-UGC-NET in June 2013.
- Cleared GATE in March 2011.
- M.Sc. Mathematics from C.C.S. University, Meerut.
- B.Sc. from C.C.S. University, Meerut.

Position Held:

- Worked as UGC-SRF at Department of Mathematics, I.I.T. Roorkee, Roorkee from January 2015-May 2016.

- Worked as UGC-JRF at Department of Mathematics, I.I.T. Roorkee, Roorkee from January 2013-Decemeber 2014.

Area of Specialization:

Real and Complex Analysis, Approximation Theory, Operator Theory, Quantum Calculus

Teaching Experience:

- Currently, I am working as Assistant Professor in the department of Mathematics at Central University of Haryana, India (01/09/2016 to till date).
- Taking tutorial classes of B. Tech first year (MA-001 and MA-002) since 2013 in Indian Institute of Technology Roorkee.
- Taking lectures of M. Sc. first year (Industrial and Applied Mathematics) in Indian Institute of Technology Roorkee.

Course Taught:

- **To M.Sc. Mathematics:** Linear Algebra, Complex Analysis, Abstract Algebra, Applied Discrete Mathematics, Advanced Complex Analysis, Mechanics, Operations Research, Rings and Modules, Typesetting in LaTeX, Differential Geometry**.**

- **To B. Tech:** Mathematics I & II

Research Guidance:

- **M.Sc. Students Project/Dissertation:** 40 Completed
- **Ph.D. Students:** 01 (In Progress)

Research Profile:

Publications:

1. **Arun Kajla,** The Kantorovich variant of an operator defined by D. D. Stancu, Applied Mathematics and Computation 316 (2018) 400-408. (**IF= 4.091**) **(Elsevier)**

2. **Arun Kajla,** Generalized Bernstein-Kantorovich-type operators on a triangle, Mathematical Methods in the Applied Sciences 42 (12) (2019) 4365-4377. **(IF=2.321)**

3. **Arun Kajla,** S. A. Mohiuddine and Abdullah Alotaibi, Blending-type approximation by Lupas–Durrmeyer-type operators involving Pólya distribution, Mathematical Methods in the Applied Sciences (2021) 1–12 DOI: 10.1002/mma.7368. **(IF=2.321)**

4. **Arun Kajla** and Tuncer Acar, Bezier-Bernstein-Durrmeyer type operators, Revista de la Real Academia de Ciencias Exactas, Físicas y Naturales. Serie A. Matemáticas (RACSAM) 114:31 (2020) 1-11. **(IF= 2.169) (Springer)**

5. Jitendra Kumar Singh, Purshottam Narain Agrawal **and Arun Kajla,** Approximation by modified q-Gamma type operators via A-statistical convergence and power series method, Linear and Multilinear Algebra, DOI: 10.1080/03081087.2021.1960260. **(IF= 1.736)**

6. P. N. Agrawal, **Arun Kajla** and Sompal Singh, Modified α-Bernstein–Durrmeyer-type operators, Iranian Journal of Science and Technology, Transactions A: Science, (2021) https://doi.org/10.1007/s40995-021-01197-y. **(IF=1.194)**

7. P. N. Agrawal, **Arun Kajla** and Dharmendra Kumar, Modified $\rho -$ Bernstein operators for functions of two variables, Numerical Functional Analysis and Optimization, 42 (9) (2021) 1073–1095. **(IF=1.042)**

8. **Arun Kajla** and Dan Miclaus, Approximation by Stancu-Durrmeyer type operators based on Polya-Eggenberger distribution, Filomat 32 (12) (2018) 4249-4261. (**IF=0.848**)

9. **Arun Kajla**, Mohammad Mursaleen and Tuncer Acar, Durrmeyer-type generalization of parametric Bernstein operators, Symmetry (2020), 12, 1141. **(IF =2.713)**

10. **Arun Kajla** and Dan Miclaus, Bezier variant of the Sz$\acute{a}$sz-Durrmeyer type operators based on the Poisson-Charlier polynomials, Filomat, Vol 34, No 10 (2020) 3265–3273. **(IF=0.848)**

11. S. A. Mohiuddine, **Arun Kajla**, M. Mursaleen, and M. A. Alghamdi, Blending type approximation by τ-Baskakov-Durrmeyer type hybrid operators, Advances in Difference Equations (2020) 467 doi.org/10.1186/s13662-020-02925-1. **(IF= 2.421) (Springer)**
12. **Arun Kajla** and P. N. Agrawal, Sz$\acute{a}$sz -Durrmeyer type operators based on Charlier polynomials, Applied Mathematics and Computation 268 (2015) 1001-1014. (**IF= 4.091**) **(Elsevier)**

13. **Arun Kajla,** Sheetal Deshwal and P. N. Agarwal, Quantitative Voronovskaya and Gruss-Voronovskaya type theorems for Jain-Durrmeyer operators of blending type, Analysis and Mathematical Physics 9 (2019) 1241–1263. (**IF= 1.404**) **(Springer)**

14. **Arun Kajla** and Dan Miclaus, Blending type approximation by GBS operators of generalized Bernstein-Durrmeyer type, Results in Mathematics 73 (1) (2018) DOI: 10.1007/s00025-018-0773-1, 1-21. (**IF=1.199**) **(Springer)**

15. **Arun Kajla** and Dan Miclaus, Some smoothness properties of the Lupas-Kantorovich type operators based on Polya distribution, Filomat 32 (11) (2018) 3867–3880. (**IF=0.848**)

16. **Arun Kajla**, Syed Abdul Mohiuddine, Abdullah Alotaibi, Meenu Goyal and Karunesh Kumar Singh, Approximation by ϑ-Baskakov-Durrmeyer type hybrid operators, Iranian Journal of Science and Technology, Transactions A: Science 44 (2020) 1111–1118. **(IF = 1.194) (Springer)**

17. **Arun Kajla** and Tuncer Acar, A new modification of Durrmeyer type mixed hybrid operators, Carpathian Journal of Mathematics 34 (1) (2018) 47-56. (**IF= 1.778**)

18. **Arun Kajla**, Nurhayat Ispir, P. N. Agrawal and Meenu Goyal, q-Bernstein-Schurer-Durrmeyer type operators for functions of one and two variables, Applied Mathematics and Computation 275 (2016) 372-385. (**IF= 4.091**) **(Elsevier)**

19. **Arun Kajla,** Ana Maria Acu and P. N. Agrawal, Baskakov-Sz*á*sz type operators based on inverse Polya-Eggenberger distribution, Annals of Functional Analysis 8 (2017) 106-123. (**IF=0.885**)

20. **Arun Kajla** and Tuncer Acar, Modified α-Bernstein operators with better approximation properties, Annals of Functional Analysis 10 (4) (2019) 570-582. (**IF=0.885**)
21. **Arun Kajla** and P. N. Agrawal, Approximation properties of Sz*á*sz type operators based on Charlier polynomials, Turkish Journal of Mathematics 39 (2015) 990-1003. (**IF= 0.803**)

22. **Arun Kajla** and Tuncer Acar, Blending type approximation by generalized Bernstein-Durrmeyer type operators, Miskolc Mathematical Notes 19 (1) (2018) 319-336. (**IF= 1.085**)

23. Tuncer Acar and **Arun Kajla**, Degree of approximation for bivariate generalized Bernstein type operators, Results in Mathematics, (2018) 73: 79. https://doi.org/10.1007/s00025-018-0838-1, 1-20. (**IF=1.199**) **(Springer)**

24. Tarul Garg, P. N. Agrawal and **Arun Kajla,** Jain-Durrmeyer operators involving inverse Polya-Eggenberger distribution, Proceedings of the National Academy of Sciences, India Section A: Physical Sciences 89 (3) (2019) 547–557. (**IF= 1.544**) **(Springer)**

25. **Arun Kajla** and Meenu Goyal, Generalized Bernstein-Durrmeyer operators of blending type, Afrika Matematika 30 (2019) 1103–1118. **(Springer)**

26. **Arun Kajla** and Meenu Goyal, Modified Bernstein-Kantorovich operators for functions of one and two variables**,** Rendiconti del Circolo Matematico di Palermo Series 2, 67 (2018) 379-395. **(Springer)**

27. P. N. Agrawal, Nurhayat Ispir and **Arun Kajla**, Approximation properties of Bezier-summation-integral type operators based on Polya-Bernstein function, Applied Mathematics and Computation 259 (2015) 533-539. (**IF= 4.091**) **(Elsevier)**

28. Nurhayat Ispir, P. N. Agrawal and **Arun Kajla**, Rate of convergence of Lupas Kantorovich operators based on Polya distribution, Applied Mathematics and Computation 261(2015) 322-329. (**IF= 4.091**) **(Elsevier)**

29. **Arun Kajla** and Serkan Araci, Blending type approximation by Stancu-Kantorovich operators based on Polya-Eggenberger distribution, Open Physics 15 (2017) 335-343. (**IF= 1.067**)

30. Behar Baxhaku and **Arun Kajla**, Blending type approximation by bivariate generalized Bernstein type operators, Quaestiones Mathematicae (2019) 1-17**. (IF= 1.474) (Taylor & Francis)**

31. **Arun Kajla,** Approximation properties of generalized Sz*á*sz type operators, Acta Mathematica Vietnamica 43 (3) (2018) 549–563. **(Springer)**

32. **Arun Kajla**, Parveen Agarwal and Serkan Araci, A Kantorovich variant of a generalized Bernstein operators, Journal of Mathematics and Computer Science 19 (2019), 86–96.

33. **Arun Kajla**, On the Bézier variant of the Srivastava-Gupta operators, Constructive Mathematical Analysis, 1 (2) (2018), 99-107.

34. **Arun Kajla,** Generalized Bernstein-Kantorovich operators of blending type, Facta Universitatis, Series: Mathematics and Informatics 34 (2019), 491–502.

35. **Arun Kajla**, Statistical approximation of Sz*á*sz type operators based on Charlier polynomials, Kyungpook Mathematical Journal 59 (2019), 679-688.

36. Tuncer Acar and **Arun Kajla,** Blending type approximation by Bezier-summation-integral type operators, Communications Faculty of Sciences University of Ankara Series A1 Mathematics and Statistics 6 (2018) 195-208.

37. Meenu Goyal and **Arun Kajla**, Blending-type approximation by generalized Lupaş–Durrmeyer-type operators, Boletín de la Sociedad Matemática Mexicana 25 (2019) 551–566. **(Springer)**

38. **Arun Kajla**, Blending type approximation by summation-integral operators based on Polya distribution, General Mathematics 25 (1-2) (2017) 69-84.

39. P. N. Agrawal, Vijay Gupta, A. Sathish Kumar and **Arun Kajla**, Generalized Baskakov-Szasz type operators, Applied Mathematics and Computation 236 (2014) 311-324. (**IF= 4.091**) **(Elsevier)**

40. P. N. Agrawal, Nurhayat Ispir and **Arun Kajla**, GBS operators of Lupas-Durrmeyer type based on Polya distribution, Results in Mathematics 69 (2016), 397-418. (**IF=1.199**) **(Springer)**

41. Meenu Goyal, **Arun Kajla,** P. N. Agrawal and Serkan Araci, Approximation by bivariate Bernstein-Durrmeyer operators on a triangle, Applied Mathematics & Information Sciences (3) (2017) 693-702.

42. **Arun Kajla** and Meenu Goyal, Blending type approximation by Bernstein-Durrmeyer type operators, Matematicki Vesnik 70, 1 (2018) 40-54.

43. Meenu Goyal and **Arun Kajla**, Blending type approximation by generalized Lupas type operators, Boletín de la Sociedad Matemática Mexicana 25 (2019) 97–115. **(Springer)**

44. **Arun Kajla,** Blending type approximation by generalized Sz*á*sz type operators based on Charlier polynomials, Creative Mathematics and Informatics 27 (1) 2018 49-56.

45. **Arun Kajla,** Approximation for summation-integral type link operators, Khayyam Journal of Mathematics 3 (2017) 45–61.

46. **Arun Kajla** and Ruchi Gupta, Differences of operators of generalized Sz*á*sz type, Khayyam Journal of Mathematics, 6 (2020) 141-154.

47. **Arun Kajla**, Direct estimates of certain Mihesan-Durrmeyer type operators, Advances in Operator Theory, 2 (2017) 162-178.

48. **Arun Kajla** and P. N. Agrawal, Sz*á*sz-Kantorovich type operators based on Charlier polynomials, Kyungpook Mathematical Journal 56 (2016) 877-897.

49. P. N. Agrawal, Nurhayat Ispir and **Arun Kajla**, Approximation properties of of Lupas Kantorovich operators based on Polya distribution, Rendiconti del Circolo Matematico di Palermo Series 2, 65 (2016) 185-208. **(Springer)**

50. P. N. Agrawal, Meenu Goyal, and **Arun Kajla**, q-Bernstein-Schurer-Kantorovich type operators, Bollettino dell'Unione Matematica Italiana 8 (2015) 169-180. **(Springer)**

Papers in Conference proceedings

- P. N. Agrawal and Arun Kajla, Modified Baskakov-Szasz operators based on q-integers, proceeding of the international conference ICRTMAA-14, held at Roorkee during 21-23rd December 2014 (**Springer Proceedings in Mathematics & Statistics, Volume 143**) 85-108.

Conferences and Workshops:

- Participated and presented in the conference "International conference on recent trends in mathematical analysis and its applications (ICRTMAA-2014)" held at IIT Roorkee from 21-23rd December 2014.

- Participated and presented in the conference "International conference on modern mathematical methods and high performance in computing in science and technology (M3HPCST)" held at Raj Kumar Goel Institute of Technology, Ghaziabad from 27-29th December 2015.

- Participated in two week Faculty Development Programme on " Application of Digital Tools and Technology in Teaching and Learning" form June 16, 2020 to June 29, 2020 organized by Faculty of Social Sciences, IGNTU

- Worked as Program Co-Coordinator in One week online National Workshop on" Applications of Mathematical and Statistical Tools (NWAMST)" jointly organized by Department of Mathematics, Department of Statistics, and School of Education under PMMMNMT of Central University of Haryana, from March 20-24, 2021

- Participated in One week online National Workshop on" Applications of Mathematical and Statistical Tools (NWAMST)" jointly organized by Department of Mathematics, Department of Statistics, and School of Education under PMMMNMT of Central University of Haryana, from March 20-24, 2021

- Participated and completed successfully AICTE training and learning (ATAL) Academy online FDP on " Coastal & Offshore Engineering form 14-09-2020 to 18-09-2020 organized by Indian Institute of Technology Guwahati.

- Participated in the workshop "MATLAB" held at Dept. of Electrical Engineering, SOET, Central University of Haryana from 8-12th March 2019.

- Participated in the workshop "Mathematica as a Teaching Aid" held at IIT Roorkee from March 2016.

- Participated in the workshop "Applicable Analysis" held at IIT Roorkee from March 2016.

Skills:

Software Packages:	MS Office, LaTeX, Matlab, C, C++ and Mathematica, Maple
Language Known:	English and Hindi

Personal Detail:

- Father's Name — Sh. Bijendra Singh
- Mother's Name — Smt. Saroj Devi
- Nationality — Indian
- Marital status — Married
- Interest — Reading, Music, Meditation
- Permanent Address: — Village and Post-Bhatipura, District-Meerut (U.P) Pin-250001

References:

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- Dr. N. Sukavanam
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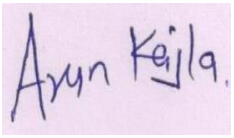
- Dr. Vijay Gupta
  Professor
  Department of Mathematics
  Netaji Subhas Institute of Technology, New Delhi
  Email: vijaygupta2001@hotmail.com

Declaration:

I hereby declare that the above information furnished by me is true to the best of my knowledge.



Date: September 09, 2021 **(Arun Kajla)**