

Debaprasanna Kar

Assistant Professor, IMA Bhubaneswar, India

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Education, Research & Teaching

April 2025–Ongoing	Institute of Mathematics and Applications, Bhubaneswar <i>Assistant Professor in Mathematics.</i>
April 2023–March 2025	Indian Institute of Science, Bangalore <i>Postdoctoral Fellow.</i>
March 2022–March 2023	Indian Institute of Technology, Bombay <i>Postdoctoral Fellow.</i>
Aug 2015 – March 2022	Indian Institute of Science Education and Research, Pune <i>Integrated Ph.D (M.Sc+Ph.D) in Mathematics. (Ph.D degree awarded)</i>
Aug 2012–2015	Institute of Mathematics and Applications, Bhubaneswar <i>B.Sc. (Hons.) in Mathematics and Computing.</i>

Research Interests

Complex Analysis, Several Complex Variables, Kähler Geometry

Teaching Experience

August 2025–Ongoing	M.Sc. Course, Functional Analysis , IMA Bhubaneswar.
August 2025–Ongoing	B.Sc. Course, Functional Analysis (Elective course) , IMA Bhubaneswar.
August 2025–Ongoing	B.Sc. Course, Functions of Several Variables , IMA Bhubaneswar.
April–July 2025	Ph.D. Course, Linear Algebra and Advanced Algebra , IMA Bhubaneswar.
April–July 2025	Ph.D. Course, Research Methodology , IMA Bhubaneswar.
Fall 2024	Teaching Assistant, Functional Analysis , IISc Bangalore.
Spring 2024	Teaching Assistant, Analysis and Linear Algebra II , IISc Bangalore.
Fall 2022	Teaching Assistant, Real Analysis , IIT Bombay.
Spring 2019	Interactive sessions and Teaching Assistant, Complex Analysis , IISER Pune.
Spring 2018	Teaching Assistant, Multi-variable Calculus , IISER Pune.
Fall 2018	Teaching Assistant, Single-variable Calculus , IISER Pune.

Publications (ORCID: 0000-0002-1101-6214)

- *Geometric estimates and comparability of Eisenman volume elements with the Bergman kernel on (G-)convex domains*, **Debaprasanna Kar**, Bulletin des Sciences Mathématiques, vol. 195, 103467 (2024).
- *Weighted boundary limits of the Kobayashi–Fuks metric on h-extendible domains*, **Debaprasanna Kar**, Analysis Mathematica, vol. 50, 215-233 (2024).
- *Existence of Geodesic Spirals for the Kobayashi–Fuks Metric on Planar Domains*, **Debaprasanna Kar**, Complex Anal. Oper. Theory 17, 46 (2023).
- *Some remarks on the Kobayashi–Fuks metric on strongly pseudoconvex domains*, **Diganta Borah and Debaprasanna Kar**, J. Math. Anal. Appl., 512(2), 126162, August 2022.
- *Boundary behavior of the Carathéodory and Kobayashi-Eisenman volume elements*, **Diganta Borah and Debaprasanna Kar**, Illinois J. Math., 64(2): 151-168, June 2020.

Academic Achievements

2023	Got selected for NBHM Postdoctoral Fellowship in Mathematics.
2018	Awarded with the Academic excellence Prize for best academic performance in iPhD in Mathematics during 2015-17, at IISER Pune.
2017-18	Qualified CSIR NET under JRF and Lecturership category.
2012-2015	Received merit scholarship from Institute of Mathematics and Applications for all three years of B.Sc.
2010	Received an award from the Hon'ble Chief Minister of Odisha, Shri Naveen Patnaik, for securing 16th rank in the Matriculation exam in Odisha. (Top 100 rank holders were felicitated)

Workshops, Internships and Conferences attended

August 2025	Participated in the Conference on Geometry and Topology in honour of Prof. M.S. Raghunathan at IMA Bhubaneswar.
June 2024	Attended Research Workshop and Conference in CR Geometry held at TIFR-CAM Bangalore.
December 2023	Participated in the workshop and conference Interactions in Several Complex Variables held at IISER Pune.
December 2022	Gave a conference talk on the geodesics of the Kobayashi–Fuks metric at Kerala School of Mathematics as a part of the Workshop and Conference Interactions in SCV .
March 2022	Delivered a talk titled " Some remarks on the Kobayashi–Fuks metric on strongly pseudoconvex domains " in the Joint In-House Symposium at IISER Pune.
February 2022	Gave an online seminar titled " Boundary behavior of the Carathéodory and Kobayashi-Eisenman Volume Elements and the Kobayashi–Fuks metric " via zoom at TIFR-CAM, Bangalore.
September 2021	IISc-IISER Pune Twenty-20 Math (virtual) Symposium.
July 2020	Virtual Math Fest conferences, 2020.
July 2020	Inter IISER-NISER Math (virtual) Meet, IINMM 2020.
December 2019	SCV/Complex Analysis discussion Meeting at Kerala School of Mathematics, Kozhikode.
August 2019	Delivered a talk titled " Boundary behavior of the Carathéodory and Kobayashi-Eisenman Volume Elements " in the In-House Symposium at IISER Pune.
July 2019	Workshop on Cauchy-Riemann Equations in Higher Dimensions held at ICTS, Bangalore.
June 2018	AIS workshop on Several Complex Variables at IISc, Bangalore.
May 2014	Science Academies' Summer Research Fellowship Programme at IISc, Bangalore.

Language & Programming Skills

English (Fluent)	\LaTeX
Hindi (Fluent)	C Programming
Odia (Native)	Mathematica
Bengali (Intermediate)	MATLAB

References

Thesis supervisor– Dr. Diganta Borah (dborah@iiserpune.ac.in)

Associate Professor, Department of Mathematics, IISER Pune.

Dr. Prachi Mahajan (prachi@math.iitb.ac.in)

Assistant Professor, Department of Mathematics
IIT Bombay.

Dr. Purvi Gupta (purvigupta@iisc.ac.in)

Assistant Professor, Department of Mathematics
IISc Bangalore.