Suvrajit Bhattacharjee, Postdoctoral fellow

Contact Information:

- suvra.bh@gmail.com

- https://suvrajitbhattacharjee.github.io

Research Interests:

- Operator algebras, quantum groups and noncommutative geometry

Education:

- Indian Statistical Institute, Kolkata
  Ph.D. in Mathematics, December, 2020
  Dissertation Topic: Quantum Symmetries in Noncommutative Geometry
  Advisor: Prof. Debashish Goswami

- Ramakrishna Mission Vivekananda University
  M.Sc. in Mathematics, June, 2015
  CGPA: 9.06

- University of Calcutta
  B.Sc. in Mathematics, June, 2013
  First-Class Honours

Employment:

- Indian Statistical Institute, Kolkata, India,
  Visiting Scientist,
  April, 2025 – present.

- Mathematics Institute, University of Oslo, Oslo, Norway,
  Postdoc,
  April, 2023 – March, 2025.

- Mathematical Institute of Charles University, Prague, Czech Republic,
  Postdoc,
  April, 2022 – March, 2023.

- Indian Institute of Science Education and Research, Kolkata, India,
  National Postdoctoral Fellowship, Science and Engineering Research Board, India,
  December, 2021 – February, 2022.

- Indian Statistical Institute, Kolkata, India,
  Visiting Scientist,
  January, 2021 – November, 2021.

- Institute of Mathematics, Polish Academy of Sciences, Warsaw, Poland,
  Adjunct Professor, (Postdoc),
  October, 2020 – September, 2022 (couldn't join due to travel restrictions caused by the pandemic).

Publications and Preprints:

- with Forough, M., "Quasi-invariant lifts of completely positive maps for groupoid actions", arXiv preprint math.OA/2405.07859, 2024.

- with Joardar, S., "Equivariant C^*-correspondences and compact quantum group actions on Pimsner algebras", Canad. J. Math., Vol. 77, 2025.

- with Goswami, D., "Complex structures on Three-point space", Proceedings of the International Conference on Infinite Dimensional Analysis, Quantum Probability and Related Topics, QP38, 2024.

- with Joardar, S., Roy, S., "Braided quantum symmetries of graph C^*-algebras", Internat. J. Math., Vol. 35, 2024.

- with Anshu, Rahaman, A., Roy, S., "Anyonic quantum symmetries of finite spaces", Lett. Math. Phys., Vol. 113, 2023.

- with Joardar, S., Mukhopadhyay, S., "Levi-Civita connections from toral actions", J. Geom. Phys., Vol. 181, 2022.

- with Chirvasitu, A., Goswami, D., "Quantum Galois groups of subfactors", Internat. J. Math., Vol. 33, 2022.

- with Biswas, I., Goswami, D., "Generalized symmetry in noncommutative (complex) geometry", J. Geom. Phys., Vol. 166, 2021.

- with Goswami, D., "Hopf coactions on odd spheres", J. Algebra, Vol. 539, 2019.

Honours and Awards:

- Fall Semester 2023, Fields Institute Thematic Program in Operator Algebras, Postdoctoral Fellowship.

- 2021-2023, Science and Engineering Research Board, India, National Postdoctoral Fellowship.

- 2021-2023, National Board for Higher Mathematics, Postdoctoral Fellowship.

- 2021-2023, Indian Institute of Science Education and Research, Postdoctoral Fellowship.

- 2015–2020, Indian Statistical Institute, Ph.D. Fellowship.

- 2015–2020, National Board for Higher Mathematics, Ph.D. Scholarship.

- 2015–2020, Council of Scientific and Industrial Research, Ph.D. Scholarship.

- 2013–2015, National Board for Higher Mathematics, M.Sc. Scholarship.

Talks:

- Crystallization and K-theoretical aspects of the quantum twistor bundle, Noncommutativity behind the dunes, Delft University of Technology, Delft. (October, 2024)

- Braided quantum groups and their actions, Noncommutativity along the North sea in Odense, University of Southern Denmark, Odense. (August, 2024)

- Equivariant lifting problem for continuous fields of completely positive maps, Operator Algebra Seminar, University of Oslo, Oslo. (September, 2023)

- Equivariant lifting problem for continuous fields of completely positive maps, Quantum Groups and Noncommutative Geometry in Prague, Charles University, Prague. (September, 2023)

- (Equivariant) lifting problem for completely positive maps, Indian Statistical Institute, Kolkata. (July, 2023)

- Actions of compact quantum groups 2, NCG&T Malý Seminar, Prague. (November, 2022)

- Actions of compact quantum groups 1, NCG&T Malý Seminar, Prague. (November, 2022)

- An introduction to (braided) quantum groups, Inter IISER-NISER Math meet, Indian Institute of Science Education and Research, Kolkata. (June, 2022)

- Kasparov product and its properties, NCG&T Malý Seminar, Prague. (April, 2022)

- Braided quantum symmetries of graph C^*-algebras, NCG&T Seminar, Prague. (April, 2022)

- Kasparov modules and constructions, NCG&T Malý Seminar, Prague. (April, 2022)

- Braided quantum symmetries of graph C^*-algebras, Quantum Groups Seminar, Copenhagen. (March, 2022)

- Quantum Groups, Indian Institute of Science Education and Research, Kolkata. (February, 2020)

- Hopf Algebroids in Noncommutative Geometry, Noncommutative Geometry and Its Applications @ NISER, National Institute of Science Education and Research, Bhubaneshwar. (January, 2020)

- Generalized Symmetry in Noncommutative Complex Geometry, Quantum flag manifolds, Charles University, Prague. (September, 2019)

- Hopf Algebroids, Graduate seminar, Indian Statistical Institute, Kolkata. (April, 2019)

- Quantum Symmetry, Graduate seminar, Indian Statistical Institute, Kolkata. (April, 2018)

- Hopf Coactions on Commutative Algebras, Graduate seminar, Indian Statistical Institute, Kolkata. (March, 2017)

- Algebraic Groups and Hopf Algebras, Graduate seminar, Indian Statistical Institute, Kolkata. (September, 2016)

- Infinite Galois Theory, Graduate seminar, Indian Statistical Institute, Kolkata. (January, 2016)

Events:

- Co-organizer of the noncommutative geometry session of IWOTA 2025, University of Twente, Enschede. (July, 2025)

- Co-organizer of the workshop Geometry and Analysis of Quantum Groups 2023, University of Oslo, Oslo. (November, 2023)

Workshops and Conferences Attended:

- Noncommutativity along the North sea in Odense, University of Southern Denmark, Odense. (August, 2024)

- Noncommutativity in the North - MikaelFest, University of Gothenburg/Chalmers University of Technology, Gothenburg. (June, 2024)

- Point sets: Dynamics, Sampling, and Operator Algebras, University of Oslo, Oslo. (May, 2024)

- Quantum Groups and Noncommutative Geometry in Prague, Charles University, Prague. (September, 2023)

- Operator Algebras and Mathematical Physics (Yasu Festa 60), University of Tokyo, Tokyo. (July, 2023)

- Quantum Groups: Current Trends and New Perspectives, University of Oslo, Oslo. (December, 2022)

- Noncommutative Harmonic Analysis and Quantum Groups, Institute of Mathematics, Polish Academy of Sciences, Będlewo. (September, 2022)

- Noncommutative Geometry and Its Applications @ NISER, National Institute of Science Education and Research, Bhubaneshwar. (January, 2020)

- KBS Fest, Indian Statistical Institute, Bangalore. (December, 2019)

- Quantum Flag Manifolds, Charles University, Prague. (September, 2019)

- Recent Advances in Operator Theory and Operator Algebras, Indian Statistical Institute, Bangalore. (December, 2018)

- International Conference on Non-commutative Geometry, S. N. Bose National Centre for Basic Sciences, Kolkata. (November, 2018)

- Conference on Quantum Groups and Non-commutative Geometry, National Institute of Science Education and Research, Bhubaneshwar. (January, 2018)

- CIMPA Research School on Recent Trends in Non-commutative Algebras, Indian Institute of Science Education and Research, Pune. (June, 2017)

Academic Visits:

- Prof. Michal Doucha, Institute of Mathematics of Czech Academy of Sciences, Prague. (February, 2025)

- Prof. Debashish Goswami, Indian Statistical Institute, Kolkata. (July, 2023)

- Prof. Adam Skalski, Institute of Mathematics, Polish Academy of Sciences, Warsaw. (August, 2022)

- Dr. Réamonn Ó Buachalla, Mathematical Institute, Charles University, Prague. (March, 2022)

- Dr. Soumalya Joardar, Indian Institute of Science Education and Research, Kolkata. (February, 2020)

- Dr. Sutanu Roy, National Institute of Science Education and Research, Bhubaneshwar. (April, 2018; November, 2019)

- Prof. Arup Pal, Indian Statistical Institute, Delhi. (January, 2018)

- Prof. Indranil Biswas, Tata Institute of Fundamental Research, Mumbai. (November, 2017)

Teaching Experience:

- Fall 2019, Teaching Assistant, Riemannian Geometry.

- Fall 2018, Teaching Assistant, Linear Algebra.

- Spring 2018, Teaching Assistant, Lie Groups and Lie Algebras.

References:

- Prof. Debashish Goswami, Stat Math Unit, Indian Statistical Institute, 203 B.T. Road, Kolkata - 700108, India, goswamid@isical.ac.in

- Prof. Sergey Neshveyev, Matematisk institutt, Universitetet i Oslo, P.O. Box 1053, Blindern, 0316 Oslo, Norway, sergeyn@math.uio.no

- Dr. Réamonn Ó Buachalla, Mathematical Institute, Charles University, Sokolovská 49/83, 18 675 Prague 8, Czech Republic, obuachalla@karlin.mff.cuni.cz

- Dr. Karen R. Strung, Institute of Mathematics, Czech Academy of Sciences, Žitná 25, 115 67 Prague 1, Czech Republic, strung@math.cas.cz