
Arundhathi Krishnan

CONTACT INFORMATION arundhathi.krishnan@uwaterloo.ca
Department of Pure Mathematics,
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RESEARCH EXPERIENCE

University of Waterloo , Canada Postdoctoral Fellow	January 2021– Present
University College Cork , Ireland Postdoctoral Fellow	October 2018– December 2020
Indian Statistical Institute , Bangalore Visiting Postdoctoral Scientist	November 2017– September 2018

RESEARCH INTERESTS Operator theory, operator algebras, noncommutative probability.

EDUCATION

Indian Institute of Technology Madras , Chennai Ph.D., Mathematics Thesis: Pseudospectrum of an element of a Banach algebra	February 2018
Indian Institute of Technology Madras , Chennai M.Sc., Mathematics CGPA : 9.5/10	2012
Madras Christian College , Chennai B.Sc., Mathematics Aggregate : 89.21 Aggregate in Mathematics : 96.57	2010

PUBLICATIONS

- Arundhathi Krishnan and S. H. Kulkarni, *Pseudospectrum of an element of a Banach algebra*, *Oper. Matrices* **11** (2017), no. 1, 263–287, doi:10.7153/oam-11-18.
- Arundhathi Krishnan and S. H. Kulkarni, *Pseudospectra of elements of reduced Banach algebras*, *Adv. Oper. Theory* **2** (2017), no. 4, 475–493, doi:10.22034/aot.1702-1112.
- Arundhathi Krishnan and S. H. Kulkarni, *Pseudospectra of elements of reduced Banach algebras II*, *Funct. Anal. Approx. Comput.* **10** (2018), no. 2, 33-45.

PREPRINTS

- Claus Köstler, Arundhathi Krishnan and Stephen Wills, *Markovianity and the Thompson Monoid F^+* , Preprint doi:<https://arxiv.org/abs/2009.14811>
- Rolf Gohm, Claus Köstler, and Arundhathi Krishnan, *The Thompson group F from the viewpoint of noncommutative probability*, Preprint in preparation.

RECENT TALKS

- Invited talk, Irish Mathematical Society Annual Scientific Meeting (virtual), Dublin City University, January 2021.
- Analysis Seminar (virtual), University of Glasgow, October 2020.
- Contributed talk, 48th Canadian Operator Symposium (virtual), May 2020.

CONFERENCE TALKS

- “Markovianity and the Thompson Monoid F^+ ”, participant talk at Autumn School on Multipliers in Noncommutative analysis and their applications, Laboratoire des mathématiques de Besançon, Besançon, France, November 2019.
- “Markovianity and the Thompson Monoid F^+ ”, participant talk at *Young Mathematicians in C^* -algebras (YMC *A) 2019*, University of Copenhagen, August 2019.
- “Markovianity and the Thompson Monoid F^+ ”, contributed talk at *International Workshop on Operator Theory and Applications (IWOTA) 2019*, University of Lisbon, July 2019.
- “Pseudospectra of elements of reduced Banach algebras”, invited talk at *SHK Fest*, IIT Madras, Chennai, June 2018.
- “Pseudospectra of elements of reduced Banach algebras”, poster presentation at *Indian Women and Mathematics Annual Conference 2017*, IISc Bangalore, July 2017.
- “Determining elements of a Banach algebra through pseudospectra”, contributed talk at *Preservers Everywhere 2017*, Bolyai Institute, University of Szeged, Szeged, June 2017.
- “Pseudospectra of elements of reduced Banach algebras”, contributed talk at *International Workshop on Operator Theory and Applications (IWOTA) 2016*, Washington University, St. Louis, July 2016.

SEMINAR TALKS

- Noncommutative Probability Seminar, University College Cork, January 2020.
- Analysis Seminar, University College Dublin, November 2019.
- Mathematics Seminar, University College Cork, January 2019.

SCHOLARSHIPS

- Awarded Government of Ireland Postdoctoral Fellowship for two years (**2018–2020**)
- Awarded CSIR research fellowship to pursue the Ph.D. programme in Mathematics (**2012–2017**)
- Awarded Half Time Research Assistantship by IIT Madras to pursue the Ph.D. programme in Mathematics (**July 2012–October 2012**)
- Awarded National Board for Higher Mathematics M.Sc. Scholarship (**2011–2012**)
- Awarded Institute Merit Scholarship by IIT Madras (**2010–2011**)
- Awarded NCERT National Talent Search Examination (NTSE) Scholarship (**2005–2010**)

GRANTS AND TRAVEL AWARDS

- Irish Research Council Postdoctoral Direct Research Expenses (EUR 10,000) (**2018–2020**)
- Per diem Conference Grant (USD 725), Quantum Symmetries Program at MSRI (**January 2020**)
- International Conference Grant (INR 150,000), IIT Madras (**2017**)
- Travel Grant (USD 2080), International Workshop on Operator Theory and Applications (**2016**)
- Travel Grant (INR 20,839), IIT Madras Alumni Association (**2016**)

PRIZES

- Received prizes of merit for highest CGPA in M.Sc. Mathematics, IIT Madras (**2012**)
- Secured an All India Rank of 12 (out of about 2500 candidates) in the Joint Admission Test for M.Sc. conducted by the IITs (**2010**)
- Received prizes of merit for best performance in B.Sc. Mathematics, Madras Christian College (**2009, 2010**)

TEACHING

- Introduction to Group Theory with Applications at University of Waterloo, Spring 2021.
- Functional Analysis at University College Cork, Autumn 2020.
- Introduction to Analysis at University College Cork, Spring 2020.

SERVICE

Reviewer Duties

- Journal of the Australian Mathematical Society
- The Journal of Analysis

Outreach

- Staff for UCC Mathematics Enrichment Programme (for school students), 2018-2019 and 2019-2020.
- Lecture in online international workshop “Initiation into Linear Algebra”, Mar Thoma College, Thiruvalla, October 2020.
- Talk titled “The Spectral Theorem” in the SAMOSE seminar Series, NCBS, Bangalore, September 2018.
- Talk titled “The Drunkard’s Walk” for undergraduates at St. Joseph’s College, Bangalore, July 2018.

OTHER
QUALIFICATIONS

- Postgraduate Certificate in Teaching and Learning in Higher Education at University College Cork, January 2021.
- Successfully completed the online EPIGEUM course on Research Integrity- Natural and Physical Sciences.

LINKS

- [Research Gate](#)
- [Google Scholar](#)

REFERENCES

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claus@ucc.ie Cork, Ireland

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