Curriculum Vitae

Mohan Ravichandran

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Education and work Experience

- Spring 2014-Current Assistant Professor, Mimar Sinan University, Istanbul

- 2012-2013, Visiting Assistant Professor, Bilgi University, Istanbul

- 2009-2012, Visiting Assistant Professor, Sabancı University, Istanbul

- Phd in Mathematics, UNH, 2009
  Thesis: *Kadison-Singer algebras with applications to von Neumann algebras.*
  Advisor: Professor Liming Ge

- BTech in Computer Science, IIT Chennai, 2003
  Thesis: *On Uniquely restricted Matchings.*

Research interests and highlights

Operator Algebras, Random Matrix Theory, Convex Geometry.

Publications

Appeared, Accepted

1. *A Følner invariant for type* II_1 *factors*, Expo. Math. **25** (2007), no. 2, 117–130 (with Jon P. Bannon)

2. *On transitive algebras containing a standard finite von Neumann subalgebra*, J. Funct. Anal. **252** (2007), no. 2, 581–602.(with Junsheng Fang and Don Hadwin)

3. *The radial masa in a free group factor is maximal injective*, J. London Mathematical Society, **82**(2010), no. 3, 787-809,(with Jan Cameron, Junsheng Fang and Stuart White)

4. *Uniqueness of the Predual of* H^∞ *of a multiply connected domain*, Proc. Amer. Math. Soc. 142 (2014), 1641-1648, (with Onur Yavuz)

5. *The Schur-Horn theorem for operators with finite spectrum*, Proc. Amer. Math. Soc. 142 (2014), 3441-3453 (with Rajarama Bhat)

6. *Multivariable Schur-Horn theorems*, Journal of the London Mathematical Society, **112**(2016), no. 1, 206-234, (with Pedro Massey).

Preprints

7. *The Schur-Horn theorem in von Neumann algebras.*

8. *Principal submatrices and restricted invertibility.*

9. *Mixed determinants and the Kadison-Singer problem.*

Other papers

10. *Parcel density and development decisions: A new mathematical model*, Near Eastern Economics journal, Spring 2010, (with Richard England).

Grants

- Tubitak 1001, project 115F204, 2015-2017, titled "Spectral problems in von Neumann algebras".

Awards

- Dissertation year fellowship (2008-09) from the University of New Hampshire.

- Teaching award from Sabanci Unversity, June 2012, First year instructor award.

Talks given(Selected)

- GPOTS-Great Plains Operator Theory Symposium, Cincinnati, June 2008, *The Radial masa in a free group factor is maximal injective*

- AMS annual meeting, Washington DC, January 2009, *Generalizing Triangular algebras*

- GPOTS, Denver, June 2009, *Generalizing Triangular algebras*

- Istanbul Analysis Seminar, November 2010, *The Drury-Arveson Space*

- Bilkent University Analysis seminar, April 2012, *The Schur-Horn theorem in von Neumann algebras.*

- Conference on Operator Algebras and Related topics, ISI Bangalore, Jan 2013, *On a conjecture of William Arveson.*

- Bogazici University, March 2013, *Convexity in operator algebras.*

- IISER Mohali, February 2014, *Multivariable Schur-Horn theorems.*

- Bogazici University, February 2016, *The van der Waerden conjecture and real stable polynomials.*

- Istanbul-Ankara Number theory meetings, April 2016, *Real Stable polynomials, strongly Rayleigh measures and the Kadison-Singer problem.*

- MSR Bangalore, September 2016, *Mixed Determinants, Restricted Invertibility and Kadison-Singer.*

- IMSc, Chennai, September 2016, Two talks *The Kadison-Singer problem* and *A proof of the Kadison-Singer problem using mixed determinants and three combinatorial problems.*

- Koc University, October 2016, *Strongly Rayleigh measures and the Kadison-Singer problem.*

References

Available upon request.