Sajad Sadeghi

Curriculum Vitae

Education

2012–2016 **Ph.D. in Mathematics**, *The University of Western Ontario (UWO)*, London,

Supervisor: Prof. Masoud Khalkhali

Title of Thesis: On Logarithmic Sobolev Inequality And A Scalar Curvature Formula For

Noncommutative Tori

2007–2010 M.Sc. in Mathematics, Tarbiat Modares University (TMU), Tehran, Iran.

Supervisor: Prof. Alireza Medghalchi

Title of Thesis: Hecke C*-Algebras and Schlichting Completion Theorem

2002–2007 B.Sc. in Mathematics, Shahid Beheshti University (SBU), Tehran, Iran.

Research Interests

- Noncommutative geometry
- Operator algebras and C*-algebras
- Spectral geometry
- Geometric analysis
- Harmonic analysis

Publications

- A Scalar Curvature Formula for the Noncommutative Three Torus, joint with M. Khalkhali and A. Moatadelro, arXiv:1610.04740.
- On Logarithmic Sobolev Inequality for the Noncommutative Two Torus, joint with M. Khalkhali, J. Pseudo-Differ. Oper. Appl. Vol. 8, Issue 3, pp 453- 484 (2017).

Talks and Presentations

- A Glimpse of Coarse Structures: From Metric Spaces to Noncommutative Spaces, Institute For Research in Fundamental Sciences, Tehran, Iran, September 5, 2018.
- A Survey on Curvature of Noncommutative 3-Torus, 49th Iranian Mathematics Conference, Iran University of Science and Technology, Tehran, Iran, August 23-26, 2018.
- A Scalar Curvature Formula for the Noncommutative Three Torus, NCG Seminar, UWO, October 2016.
- Spin Manifolds and Dirac Operators, NCG Seminar, UWO, January 2015.

- Clifford Algebras and Their Representations II, NCG Seminar, UWO, January 2015
- Clifford Algebras and Their Representations I, NCG Seminar, UWO, January 2015.
- An Operator Algebraic Proof of Uniformization Theorem, NCG Seminar, UWO, April 2014.
- Dirac Operators and Geodesic Metric on the Harmonic Sierpinski Gasket, Oral Comprehensive Exam, UWO, March 2013.
- Dirac Operators and Geodesic Metric on the Sierpinski Gasket, NCG Seminar, UWO, March 2013.
- Connes' Trace Theorem, NCG Seminar, UWO, February 2013.
- Dixmier Trace, NCG Seminar, UWO, January 2013.
- Hecke C*-algebras, NCG Seminar, UWO, October 2012.
- Introduction to Operator Algebras III: Gelfand-Naimark Theorem, NCG Seminar, UWO, October 2012.
- Introduction to Operator Algebras II: Gelfand-Naimark Theorem, NCG Seminar, UWO, September 2012.
- Introduction to Operator Algebras I: Gelfand-Naimark Theorem, NCG Seminar, UWO, September 2012.

Conferences and Programs Attended

- 49th Iranian Mathematics Conference, Iran University of Science and Technology, Tehran, Iran, August 23-26, 2018.
- Conference on Geometry, Representation Theory and the Baum-Connes Conjecture, Fields Institute, Toronto, Canada, July 18-22, 2016.
- Noncommutative Geometry and Spectral Invariants, Université du Québec à Montréal, Montréal, Canada, June 29- July 3, 2015.
- Noncommutative Geometry Workshop, Western University, London, Canada, June 11-12, 2015.
- Workshop on the Geometry of Noncommutative Manifolds, Fields Institute, Toronto, Canada, March 16-18, 2015.
- Noncommutative Geometry and its Applications, Hausdorff Research Institute for Mathematics, Bonn, Germany, September 1-30, 2014.
- Focus Program on Noncommutative Geometry and Quantum Groups, Fields Institute, Toronto, Canada, June 17-28, 2013.
- Winter School on Operator Algebras, RIMS, Kyoto University, Kyoto, Japan, December 7-16, 2011.
- Conference on C*-Algebras and Related Topics, RIMS, Kyoto University, Kyoto, Japan, September 5-9, 2011.
- Program on Noncommutative Geometry, Institute for Research in Fundamental Sciences (IPM), Tehran, Iran, September 2010- August 2011.

- 40th Iranian Mathematics Conference, Sharif University of Technology, Tehran, Iran, August 17-20, 2009.
- The 2nd School and Conference on Noncommutative Geometry, Institute for Research in Fundamental Sciences (IPM), Tehran, Iran, April 19-30, 2009.
- 18th Seminar on Mathematical Analysis and its Applications, Tarbiat Moallem University, Tehran, Iran, April 14-15, 2009.
- 39th Iranian Mathematics Conference, Shahid Bahonar University, Kerman, Iran, August 24-27, 2008.
- 17th Seminar on Mathematical Analysis and its Applications, Arak University, Arak, Iran, April 23-24, 2008.

Other Workshops

- Professional Communication Skills, Teaching Support Centre, UWO, Winter 2016.
- Public Speaking: Giving Effective Presentations in Grad School, Teaching Support Centre, UWO, Winter 2016.

Certificates

- Communication in the Canadian Classroom (12 hours), Teaching Support Centre, UWO, Winter 2016.
- Teaching in the Canadian Classroom (16 hours), Teaching Support Centre, UWO, Winter 2016.
- The Language of Research Presentations (10 hours), Teaching Support Centre, UWO, Winter 2016.

Teaching Experiences

- Calculus 1, Iran University of Science and Technology, Winter 2018.
- Calculus 2, Iran University of Science and Technology, Winter 2018.
- Calculus 1, Iran University of Science and Technology, Fall 2017.
- Calculus 2, Iran University of Science and Technology, Fall 2017.
- Methods of Matrix Algebra, Western University, Fall 2016.
- Differential Equations, University of Applied Science and Technology, Winter 2012.
- Differential Equations, Azad University of Boueinzahra, Summer 2011.
- Probability and Statistics, Azad University of Boueinzahra, Summer 2011.
- Calculus 2, Azad University of Boueinzahra, Winter 2011.
- Probability and Statistics, Azad University of Boueinzahra, Winter 2011.
- Probability and Statistics, Azad University of Boueinzahra, Winter 2011.
- Grade 10 Mathematics, Imamjavad Highschool, 2006-2009.
- Grade 10 Mathematics, Imamhadi Highschool, 2004-2005.