

Curriculum Vitae

Nasser Golestani, Ph.D., Mathematics

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1 Personal Information

- Name: Nasser Golestani
- Address: Department of Pure Mathematics, Faculty of Mathematical Sciences, Tarbiat Modares University, Jalal Ale Ahmad Highway, P.O. Box 14115-134, Tehran, Iran
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2 Academic Appointments

- Associate Professor, Oct 2022–Now, Department of Mathematics, Faculty of Mathematical Sciences, Tarbiat Modares University, Tehran, Iran.
- Assistant Professor, Aug 2015–Oct 2022, Department of Mathematics, Faculty of Mathematical Sciences, Tarbiat Modares University, Tehran, Iran.
- Associate Dean for Research at the Faculty of Mathematical Sciences, Jan 2023–now, Tarbiat Modares University, Tehran, Iran.
- Researcher, 2015–Now, School of Mathematics, Institute for Research in Fundamental Sciences (IPM), Tehran, Iran.

3 Education

- B.Sc. (with honours), Mathematics, University of Tehran, 2004–2009
- M.Sc. (with honours), Mathematics, *Group-valued continuous functions*, Supervisor: Dr. F. Ayatollah Zadeh Shirazi, University of Tehran, 2009–2011
- Ph.D. (with honours), Mathematics, *The category of Bratteli diagrams and functors on the category of C^* -algebras*, Supervisors: Prof. Massoud Amini (Tarbiat Modares University) and Prof. George A. Elliott (University of Toronto), 2011–2015

4 Honours and Prizes

- Third Prize, 14th International Mathematics Competition for University Students (IMC), Bulgaria, August 2007
- Second Prize, 31th National Mathematics Competition for University Students, Iranian Mathematical Society, Mashhad, Iran, May 2007
- Second Prize, 15th International Mathematics Competition for University Students (IMC), Bulgaria, July 2008
- First Prize, 32th National Mathematics Competition for University Students, Iranian Mathematical Society, Tehran, Iran, May 2008
- Second Prize, 10th International Scientific Olympiad for University Students (Mathematics), Tehran, Iran, July 2009
- Rank one among graduates of Pure Mathematics, University of Tehran, 2011
- Distinguished researcher among graduates, University of Tehran, 2011
- Rank one in entrance exam for Ph.D., Tarbiat Modares University, 2011
- Member of Iran's National Elites Foundation, 2008–now
- Research Award, Fields Institute, Toronto, Canada, April–June, 2014 (not used)
- Fellowship, Ministry of Science, Research and Technology (Iran), 2014–2015
- Functional Analysis Award, An Annual Iranian Award, 2016
- First Alimohammadi Prize in Mathematics, 2017
- The 22th Kharazmi Youth Award, 2021
- Abureihan Prize, Academy of Sciences of Iran, 2023

5 Research Interests

Operator Algebras, K-theory, Topological Dynamical Systems, Mathematical Modelling

6 Research Papers

1. M. Amini, N. Golestani, S. Jamali, and N. C. Phillips, *Simple tracially \mathcal{Z} -absorbing C^* -algebras*, Journal of the Institute of Mathematics of Jussieu, accepted, 2025.
2. P. Elyasi and N. Golestani, *Stable and real rank for crossed products by finite groups*, Indiana University Mathematics Journal, accepted, 2025.
3. N. Golestani, M. Hosseini, and H. Yahya Oghli, *Topological factoring of zero dimensional dynamical systems*, Studia Mathematica, accepted, 2025.

4. M. Amini, N. Golestani, S. Jamali, and N. C. Phillips, *Finite group and integer actions on simple tracially \mathcal{Z} -absorbing C^* -algebras*, Journal of Operator Theory 92 (2024), no. 2, 505–547.
5. N. Golestani, *Categorical Relation between Dimension Groups, C^* -algebras, and Cantor Minimal Systems* (in Persian), Mathematical Researches 9 (2023), 164–188.
6. N. Golestani and M. Hosseini, *On topological rank of factors of Cantor minimal systems*, Ergodic Theory and Dynamical Systems, 42 (2022), no. 9, 2866–2889.
7. M. Amini, G. A. Elliott, and N. Golestani, *The category of ordered Bratteli diagrams*, Canadian Journal of Mathematics 73 (2021), no. 1, 1–28.
8. M. Ali Asadi-Vasfi, N. Golestani, and N. C. Phillips, *The Cuntz semigroup and the radius of comparison of the crossed product by a finite group*, Ergodic Theory and Dynamical Systems, 41 (2021), no. 12, 3541–3592.
9. M. Forough and N. Golestani, *The weak tracial Rokhlin property for finite group actions on simple C^* -algebras*, Documenta Mathematica 25 (2020), 2507–2552.
10. M. Ahmadi, N. Golestani, and A. Moussavi *Generalized quasi-Baer $*$ -rings and Banach $*$ -algebras*, Communications in Algebra 48 (2020), no. 5, 2207–2247.
11. M. Amini and N. Golestani, *Discretization of topological spaces*, Quarterly Journal of Mathematics, 67 (2016), no. 4, 781–799.
12. M. Amini, G. A. Elliott, and N. Golestani, *The category of Bratteli diagrams*, Canadian Journal of Mathematics 67 (2015), no. 5, 990–1023.
13. F. Ayatollah Zadeh Shirazi and N. Golestani, *On classifications of transformation semigroups: indicator sequences and indicator topological spaces*, Filomat 26 (2012), no. 2, 313–329.
14. F. Ayatollah Zadeh Shirazi and N. Golestani, *Functional Alexandroff spaces*, Hacet. J. Math. Stat. 40 (2011), no. 4, 515–522.
15. N. Golestani and S. Maleki Oache, *Maximal UHF subalgebras of certain C^* -algebras*, preprint, arXiv:2407.17004 [math.OA], 2024.
16. G. A. Elliott, N. Golestani, and S. Maleki Oache, *Elliott’s abstract classifying category*, preprint, 2025.

7 Research Projects

- *Minimal classifying category and maximal UHF subalgebras of C^* -algebras*, INSF, 2025
- *Classification and factors of decisive systems*, Research Project, Institute for Research in Fundamental Sciences (IPM), Tehran, 2023–2024
- *Discrete group actions on tracially \mathcal{Z} -absorbing C^* -algebras*, Research Project, Institute for Research in Fundamental Sciences (IPM), Tehran, 2022–2023
- *Cantor minimal systems and symbolic dynamics*, Research Project, Institute for Research in Fundamental Sciences (IPM), Tehran, 2021–2022

- *Group actions on simple tracially \mathcal{Z} -absorbing C^* -algebras*, INSF, 2020–2021
- *Group actions on C^* -algebras and topological spaces*, Research Project, Institute for Research in Fundamental Sciences (IPM), Tehran, 2020–2021
- *Approaches to the classification of separable C^* -algebras*, Research Project, Institute for Research in Fundamental Sciences (IPM), Tehran, 2016–2017
- *The category of Cantor minimal systems*, Research Project, Institute for Research in Fundamental Sciences (IPM), Tehran, 2015–2016
- *Completion of modal algebras*, Research Project, Institute for Research in Fundamental Sciences (IPM), Tehran, 2010–2011

8 Supervised PhD Students

- Parisa Elyasi, *Regularity properties of C^* -algebra crossed products*, Tarbiat Modares University, 2019–2025
- Saeid Maleki Oche, *Structure and symmetries of tracially \mathcal{Z} -absorbing C^* -algebras*, Tarbiat Modares University, 2019–now
- Hamed Yahya Oghli, *Factors of dynamical systems with decisive or nonsimple ordered Bratteli diagrams*, Tarbiat Modares University, 2018–now
- Farangis Azarakhsh, *Ergodic and topological properties of iterated function systems based on a SFT*, Tarbiat Modares University, 2022–now.
- Parastoo Naderi, *The Cuntz functor and classification of C^* -algebras*, Institute for Advanced Studies in Basic Sciences, Co-supervised with Prof. J. Ruin, 2017–2022

9 Teaching Experience

- Real Analysis I, Real Analysis II, Functional Analysis I, Functional Analysis II, Operator Algebras, Operator Theory, Symbolic Dynamics, Topological Dynamical Systems, Calculus for Engineers, Lecturer, Tarbiat Modares University, 2016–now
- Calculus II, lecturer, College of Science, University of Tehran, 2012
- Mathematical Olympiad for university students, University of Tehran, 2010
- Mathematical Logic, Applied Linear Algebra, Calculus, Basic Geometry, Elementary Number Theory, Complex Variables, Payam-e-Nour University, Varamin Branch, Iran, 2013–2015

10 Conference Presentations

- Weakly Seminar on Operator Algebra and its Applications (OAA), Institute for Research in Fundamental Sciences, Tehran, Iran, 2012–2018
- *The category of Bratteli diagrams*, The 21th Seminar on Mathematical Analysis and its Applications, Islamic Azad University, Hamedan, Iran, November 27, 2014

- *The category of Bratteli diagrams*, Frontiers in Mathematical Sciences, 3rd Conference, Institute for Research in Fundamental Sciences, Tehran, Iran, December 29, 2014
- *C*-algebras and dynamical systems, a categorical approach*, 46th Annual Iranian Mathematics Conference (AIMC 46), Yazd University, Yazd, Iran, August 26, 2015
- *C*-algebras and Topological Dynamics*, Mini course during The Third Workshop on Operator Algebras and its Applications, IPM, Tehran, Iran, January 5–6, 2016
- *C*-algebras and ordered Bratteli diagrams*, The 4th Seminar on Harmonic Analysis and Applications, Kharazmi University, Tehran, Iran, January 21, 2016
- *A Workshop on Crossed Products of C*-algebras and Locally Compact Groups* (with M. Amini and H. Nikpey), Kharazmi University, Tehran, Iran, January 22, 2016
- *K-theory for C*-algebras*, University of Tehran, Tehran, Iran, May 1, 2016
- *C*-dynamical systems*, University of Tehran, Tehran, Iran, May 8, 2016
- *The category of ordered Bratteli diagrams*, Special Week on Operator Algebras, Research Center for Operator Algebras, East China Normal University, Shanghai, China, June 6–10, 2016
- *A categorical approach to classification of C*-algebras*, The Fourth Workshop on Operator Algebras and its Applications, IPM, Tehran, Iran, December 6–8, 2016
- *Classification of C*-algebras via Elliott invariant and Cuntz semigroup*, Mini course during The Fourth Workshop on Operator Algebras and its Applications, IPM, Tehran, Iran, December 3–4, 2016
- *Introduction to Coarse Geometry and C*-algebras*, Mini course during The Fifth Workshop on Operator Algebras and its Applications, IPM, Tehran, Iran, February 3–4, 2018
- *Tracial Rokhlin property for finite group actions on non-unital simple C*-algebras*, The Fifth Workshop on Operator Algebras and its Applications, IPM, Tehran, Iran, February 5–8, 2018
- *Weak tracial Rokhlin property for finite group actions on simple C*-algebras*, The International Workshop on Operator Theory and Applications (IWOTA), East China Normal University, Shanghai, July 23–27, 2018
- *Rokhlin-type properties for actions on simple C*-algebras*, The 5th Seminar on Operator Theory and its Applications, Institute for Advanced Studies in Basic Sciences, Iran, March 13–14, 2019.
- *Introduction to K-theory*, Mini course during The Second International Workshop on Leavitt Path Algebras and Graph C*-algebras, Kharazmi University, Tehran, July 7, 2019.
- *Finite group actions on simple C*-algebras*, The Third Caucasian Mathematics Conference (CMC-III), Rostov-on-Don, Russia, August 26–29, 2019.
- *Group actions on tracially \mathcal{Z} -absorbing C*-algebras*, The 7th Workshop on Operator Algebras and its Applications, IPM, Tehran, Iran, January 9, 2020
- *The topological rank of Cantor minimal systems*, Special Week on Operator Algebras, Research Center for Operator Algebras, East China Normal University and Fudan University, Shanghai, China (online), August 10, 2020

- *Factors of finite rank Cantor Minimal Systems*, CIRM conference on Algebraic and Combinatorial Invariants of Subshifts and Tilings, France, 11–15 January 2021,
- *Introduction to K -theory and Elliott Clasification Program*, a course in CIMPA-IPM-Khansar School on Graph Algebras, Current Trends and Perspectives, Virtual, July 3–July 13, 2021
- *On the rank problem for factors of Cantor minimal systems*, The 11-th Seminar On Geometry And Topology, Yasouj University, Iran, January 20–22, 2021
- *The crossed products of group actions on tracially \mathcal{Z} -absorbing C^* -algebras*, International Conference on Operators on Banach Algebras and Related Topics, Tarbiat Modares University, July 16–17, 2022
- *Dimensions and ranks for crossed products of C^* -algebras*, 55th Annual Iranian Mathematics Conference, Mashhad, Iran, August 15, 2024
- *Elliott's Program for Classification of Operator Algebras and Applications in Dynamical Systems*, Institute for Research in Fundamental Sciences, Tehran, Iran, September 25, 2024

11 Conference Participation

- A Workshop on Operator Structure of Fourier Algebra, Institute for Research in Fundamental Sciences, Tehran, Iran, July 16–17, 2012
- Weakly Seminar on Operator Algebra and its Applications (OAA), Institute for Research in Fundamental Sciences, Tehran, Iran, 2012–2015
- Two-day Meeting on NCG and Physics, School of Physics, Institute for Research in Fundamental Sciences, Tehran, Iran May 8–9, 2013
- A Workshop on Banach Algebras and Harmonic Analysis, Institute for Research in Fundamental Sciences, Tehran, Iran, May 15–16, 2013
- Frontiers in Mathematical Sciences, 2nd Conference, Sharif University of Technology, December 25–27, 2013
- The 2nd Seminar on Harmonic Analysis and Application, Institute for Research in Fundamental Sciences, Tehran, Iran, January 5–7, 2014
- A Workshop on Quantum Groups and Poisson Boundaries, Institute for Research in Fundamental Sciences, Tehran, Iran, June 7–9, 2014
- A Workshop on Mechanism Designs and Computational Modelling of Social Systems, Institute for Research in Fundamental Sciences, Tehran, Iran, November 19–20, 2014
- The 21th Seminar on Mathematical Analysis and its Applications, 26–27 November 2014, Islamic Azad University, Hamedan, Iran
- Frontiers in Mathematical Sciences, 3rd Conference, Institute for Research in Fundamental Sciences, Tehran, Iran, Dec 29, 2014–Jan 1, 2015
- The Workshop on Operator Algebras and its Applications, Institute for Research in Fundamental Sciences, Tehran, Iran, January 7–9, 2015

- Short Course and Workshop on Reduced Group C^* -algebras, Institute for Research in Fundamental Sciences, Tehran, Iran, April 5–6, 2015
- 4th Meeting on Contemporary Mathematics, Institute for Research in Fundamental Sciences, Tehran, Iran, May 10, 2015
- Focus Programme in C^* -algebras, Workshop on C^* -algebras: Geometry and Actions, Munster, Germany, July 13–17, 2015
- 46th Annual Iranian Mathematics Conference (AIMC 46), Yazd University, Yazd, Iran, August 25–28, 2015
- Seminar on Challenges for Mathematical Sciences, Tarbiat Modares University, Tehran, Iran, October 21–22, 2015
- The Third Workshop on Operator Algebras and its Applications, Institute for Research in Fundamental Sciences, Tehran, Iran, January 7–10, 2016
- The 4th Seminar on Harmonic Analysis and Applications, Kharazmi University, Tehran, Iran, January 20–21, 2016
- The 4th Seminar on Functional Analysis and its Applications, Ferdowsi University of Mashhad, Mashhad, Iran, March 2–3, 2016
- A Workshop on Approximation Properties of von Neumann Algebras, IPM, Tehran, Iran, March 5 and 7, 2016
- Special Week on Operator Algebras, Research Center for Operator Algebras, East China Normal University, Shanghai, China, June 6–10, 2016
- Structure and Classification of C^* -algebras, IMPAN, Warsaw, Poland, November 21–25, 2016
- The Fourth Workshop on Operator Algebras and its Applications, Institute for Research in Fundamental Sciences, Tehran, Iran, December 6–8, 2016
- School on Dynamical Systems and Ergodic Theory, Tarbiat Modares University, Tehran, Iran, February 13–17, 2017
- The Fifth Workshop on Operator Algebras and its Applications, IPM, Tehran, Iran, February 5–8, 2018
- TMU–ICTP School and Conference on Dynamical Systems and Ergodic Theory, Tarbiat Modares University, Tehran, Iran, May 5–10, 2018
- The International Workshop on Operator Theory and Applications (IWOTA), East China Normal University, Shanghai, July 23–27, 2018
- The 6th Workshop on Operator Algebras and its Applications, IPM, Tehran, Iran, January 6–10, 2019
- The Second International Workshop on Leavitt Path Algebras and Graph C^* -algebras, Kharazmi University, Tehran, July 8–10, 2019
- The Third Caucasian Mathematics Conference (CMC-III), Rostov-on-Don, Russia, August 26–29, 2019

- The 7th Workshop on Operator Algebras and its Applications: Dynamical Systems, Ergodic Theory and Operator Algebras, IPM, Tehran, Iran, January 6–9, 2020
- Special Week on Operator Algebras, Research Center for Operator Algebras, East China Normal University and Fudan University, Shanghai, China (online), August 10–14, 2020
- The First WSU-IPM Joint Workshop on Operator Algebras, Online, September 30–October 2, 2020
- Algebraic and Combinatorial Invariants of Subshifts and Tilings, Online, CIRM, France, January 11–15, 2021
- The 8th Workshop on Operator Algebras and its Applications, Virtual, IPM, Tehran, Iran, February 16–19, 2021
- Workshop on Cuntz Semigroups, Virtual, Munster, Germany, July 12–16, 2021
- CIMPA-IPM-Khansar School on Graph Algebras, Current Trends and Perspectives, Virtual, July 3–July 13, 2021
- International Conference on Operators on Banach Algebras and Related Topics, Tarbiat Modares University, Virtual, July 16–17, 2022
- 55th Annual Iranian Mathematics Conference, Mashhad, Iran, August 14–16, 2024.
- (Upcoming) Mathematical Logic and its Applications, IPM, Tehran, May 28–29, 2025