AmirHossein Mokhtari (A.H. Mokhtari)

Affiliation: Technical Faculty of Ferdows, University of Birjand,



Objective

I aim to actively contribute to innovative research and academic endeavors by utilizing my extensive background in pure mathematics and strong analytical skills. I am enthusiastic about securing a position that not only nurtures my passion for mathematical analysis but also enables me to tackle intricate problems, collaborate with experts, and advance the field through cutting-edge discoveries. Furthermore, drawing from my extensive academic teaching experience (since 2007), I employ effective methods to teach mathematical concepts. I utilize advanced psychological techniques tailored to each student's mental and behavioral state, aiming to enhance the transfer of mathematical concepts. With a demonstrated track record in teaching, I am committed to not only contributing to research but also to enriching the educational landscape through innovative pedagogical approaches."

Education

• Ph.D. in Pure Mathematics (Analysis), Ferdowsi University of Mashhad, Iran September 2010 - December 2015

Dissertation: Lie Derivations on Module Extension Algebras

Supervisor: Professor Hamid Reza Ebrahimi Vishki

• Master's in Pure Mathematics (Analysis), Shahid Beheshti University, Tehran, Iran September 2007 - September 2010

Thesis: Arens Regularity of Banach Algebras Supervisor: Professor Ali Reza Hosseiniun

• Bachelors in Pure Mathematics, Ferdowsi University of Mashhad, Iran September 2003 - September 2007

Professional Experience

• Assistant Professor of Mathematics, University of Birjand, Iran 2016 - Present

Leading research projects in operator theory, teaching advanced courses, supervising M.Sc. and Ph.D. students, and collaborating internationally.

- Head of the Civil Engineering Department, University of Birjand, Iran December 2023 Present
 - Overseeing departmental activities, coordinating research and faculty projects, and managing academic and administrative responsibilities.
- Head of Talented Student Program, Faculty of Engineering, University of Birjand 2019 Present
 - Mentoring high-achieving students, organizing workshops, and providing academic guidance.

Research Interests

- Functional and operator analysis
- Lie derivations and Banach algebras
- Zero product preserving maps and applications in algebraic theory
- Matrix algebras and their functional properties

Journal Publications

- 1. A.H. Mokhtari, F. Moafian, H. R. Ebrahimi Vishki, *Lie derivations on trivial extension algebras*. Annales Mathematicae Silesianae, De Gruyter Open, (2017): 31(1), 141-153.
- 2. A.H. Mokhtari and H.R. Ebrahimi Vishki, More on Lie derivations of generalized matrix algebras, Miskolc Mathematical Notes, 19.1 (2018): 385-396.
- 3. D. Bennis, H.R. Ebrahimi Vishki, B. Fahid, A. A. Khadem-Maboudi, A.H. Mokhtari, *Lie generalized derivations on trivial extension algebra*, Boll. Unione Mat. Ital. 12 (2019): 441-452.
- 4. A. H. Mokhtari and H. R. Ebrahimi Vishki, Orthogonally additive polynomials on triangular algebras, submitted.
- 5. H. Ghahramani and A.H. Mokhtari, Characterizing linear maps of standard operator algebras through orthogonality, Acta Scientiarum Mathematicarum, (2022), 777-786.
- 6. A. Mokhtari, More on proper commuting and Lie mappings on generalized matrix algebras, International Journal of Nonlinear Analysis and Applications, (2023): 14(8), 311-325.
- 7. H. Ghahramani, A.H. Mokhtari and F. Wei, *Lie centralizers and commutant preserving maps on generalized matrix algebras*, Journal of Algebra and Its Applications, (2024): 23(05), 2450106.

Conference Presentations

- 1. The 25th International Conference on Operator Theory, Timisoara, Romania, June 30 July 5, 2014, a talk on Characterizations of zero product preserving maps on rings with a nontrivial idempotent.
- 2. The 26th International Workshop on Operator Theory and Applications (IWOTA 2015), Tbilisi, Georgia, July 6 10, 2015, a talk on Lie derivations on a certain class of algebras.

- 3. The 4th Seminar on Functional Analysis and its Applications, Ferdowsi University of Mashhad, Iran, March 2-3, 2016, a talk on Proper Lie derivations on B(X).
- 4. The 9th National Conference on Mathematics of PNU, Kerman, Iran, October 18-19, 2017, talks on Lie derivation property of full matrix algebras, Zero product determined simple ring, and Evaluating Lie derivations on module extension algebras.
- 5. Caucasian Mathematics Conference II (CMC II), Van, Turkey, August 22-24, 2017, a talk on Zero Lie preserving maps on some spaces.
- 6. The 5th Seminar on Harmonic Analysis and Applications, Ferdowsi University of Mashhad, Iran, January 18-19, 2017, a talk on Recent progresses in zero product preserving maps on certain Banach algebras.
- 7. The 3rd Seminar on Operator Theory and its Applications, Ferdowsi University of Mashhad, Iran, March 8-9, 2017, a talk on Zero product preserving maps on some matrix algebras.
- 8. The 6th Seminar on Harmonic Analysis and Applications, Hakim Sabzevari University, Sabzevar, Iran, January 31 February 1, 2018, talks on Lie derivation property of some spaces and Zero product preserving maps on Lp(G).
- 9. The 4th Seminar on Operator Theory and its Applications, Bojnord, Iran, March 8-9 2018, talks on Trivial extension algebras and their Lie derivations and Some kind of mappings on generalized matrix algebras.
- 10. The 50th Annual Iranian Mathematics Conference, Shiraz, Iran, August 26-29, 2019, talks on Trivial generalized matrix algebras and their Lie derivations and Some zero product preserving maps on module extension algebras.
- 11. International e-Conference on Nonlinear Analysis and its Applications, Nanded, India, July 27-29, 2020, a talk on Orthogonally Additive 2-homogeneous polynomials on some spaces.
- 12. The First Conference on Mathematics and Applications of Mathematics (CMAM 2021), Jijel, Algeria, June 30-July 1 2021, a talk on On proper maps.
- 13. International Conference on Analysis and its Applications (ICAA 2021), Nepal, April 9-11, 2021, a talk on Preserving maps on some algebras.
- 14. 4th International e-conference on Mathematical Advances and its Applications (ICOMAA 2021), Istanbul, May 26-29, 2021, a talk on Evaluating Lie mappings on some algebras.
- 15. International Conference of Young Mathematicians (IMATHCONF 2021), Kyiv, Ukraine, June 3-5, 2021, a talk on On maps of triangular algebras.
- 16. International Conference on Mathematics and its Applications in Science and Engineering (ICMASE 2022), Bucharest, Romania, July 4-7, 2022, a talk on Mappings on rings with idempotents.
- 17. Operators on Banach Algebras and Related Topics (BAOP 2022), Tarbiat Modares University, Tehran, Iran, July 16-17, 2022, a talk on Characterizing proper linear maps.
- 18. The 55th Annual Iranian Mathematics Conference, Ferdowsi University of Mashhad, Iran, August 14-16, 2024, talks on Proper Lie maps through orthogonality.
- 19. The 55th Annual Iranian Mathematics Conference, Ferdowsi University of Mashhad, Iran, August 14-16, 2024, talks on Evaluating linear maps on some operator algebras.

Research Projects

- Zero Product Preserving Maps in Operator Algebras Funded by University of Birjand.
- Linear maps of standard operator algebras characterized by action on orthogonal element

Collaboration with Hoger Ghahramani.

Grants and Awards

- Outstanding Researcher Award, Department of Mathematics, University of Birjand.
- Research Grant from University of Birjand for project on operator algebras.

Teaching Experience

- Advanced Analysis Developed course on mathematical analysis, topology.
- Operator Theory Taught concepts in operator algebras, Lie derivations.
- Calculus I, II
- Differential equations
- Engineering Probability and Statistics
- Numerical Methods

Skills

- Research Skills: Functional analysis, operator theory, algebraic structures.
- Technical Skills: LaTeX, MATLAB, Maple.
- Languages: Persian (native), English (fluent).

Professional Memberships

- Member, Iranian Mathematical Society
- Member, International Society of Functional Analysis

Services to Professional Communities

Referee for some National and International Research Journals

Services to Professional Communities

- Referee for some National and International Research Journals
 - Acta Universitatis Sapientiae, Mathematica,
 - Bulletin of the Iranian Mathematical Society (BIMS),
 - khayyam journal of mathematics,
 - Journal of Hyperstructures,
 - Mathematical Researches,
- Thesis Advisor for Ms. Maryam Boluki on the topic "Lie derivations on generalized matrix algebras" in 2018.
- Thesis Advisor for Ms. Shima Pouresmaeel on the topic "Lie derivation on non-unital triangular algebra" in 2024.
- Thesis Advisor for Ms. Fateme Moghanibashi on the topic "Evaluating Lie derivations on triangular algebras and generalized matrix algebras" in 2025.

References

Available upon request.