

# Mohammad Fozouni

## Current position:

Assistant Professor in Mathematics  
Department of Mathematics  
Faculty of Basic Sciences and Engineering  
Gonbad Kavous University  
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Iran, Islamic Republic.

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## Personal

Born on Saturday, March 24 1984.

Place of birth: Gonbad Kavous, Golestan, Iran.

Citizen and Current resident of the Islamic Republic of Iran.

Marital status: Married.

Spouse's name: Elham Azizafshari, M. Sc. of Applied Mathematics, Operation Research.

## Education

1. Ph. D. Harmonic Analysis, Kharazmi University (2011-2014)  
Thesis: Homological and Cohomological Properties of Banach Algebras Based on Characters

Supervisor: Dr. Javad Laali  
Advisor: Dr. Morteza Essamili.

2. M. Sc. Mathematical Analysis, Kharazmi University, Tehran, Iran (2007-2009)

Thesis: Generalized Notions of Amenability  
Supervisor: Prof. Alireza Medghalchi.

3. B. Sc. Pure Mathematics, Payamnour University, Gonbad Kavous Branch (2003-2007).

## Research Interests

Key Words: General theory of Banach algebras, abstract harmonic analysis, amenability of groups and Banach algebras, homological properties of Banach modules, BSE-algebras, Game theory.

MSC: 43A07, 43A10, 43A15, 43A20, 46H05, 46H25, 46M10, 22D15, 91Axx.

## Publications

### *Journal Articles (selected)*

1. On character space of the algebra of BSE-functions, *Sahand Communications in Mathematical Analysis*, to appear.

2.  $\phi$ -injectivity and character injectivity of Banach modules, *U. P. B. Sci. Bull. Series A*, Vol. 78, Iss. 3, 2016, 43–52. [MR3577610](#).
3.  $n$ -multipliers and their relations with  $n$ -homomorphisms, *Vietnam J. Math.*, (2017) 45: 451–457.
4. Closed ideals with bounded  $\Delta$ -weak approximate identities in some certain Banach algebras, *Miskolc Math. Notes*, Vol. 17 (2016), No. 1, 413–420. [MR3527893](#).
5. Hereditary properties of character injectivity with application to semigroup algebras, *Ann. Funct. Anal.* 6 (2015), No. 2, 162–172. [MR3292523](#).
6. On  $\Delta$ -weak  $\phi$ -amenability of Banach algebras, *U. P. B. Sci. Bull. Series A*. Vol. 77, Iss. 4, 2015, 165–176. [MR3452543](#).
7. Generalized injectivity of Banach modules, *Sarajevo. J. Math.*. Vol. 11 (24), No. 2, (2015), 197–204. [MR3418894](#).
8. On  $(\sigma, \tau)$ -module extension Banach algebras, *J. Linear. Topological. Algebra*. Vol. 03, No. 04 (2014), 185–194.
9. Some properties of functional Banach algebras, *Facta Univ. Ser. Math. Inform.* Vol. 28, No. 2 (2013), 189–196. [MR3118917](#).

### Proceedings

1. On the Converse of a Theorem Due to B. Forrest, E. Kaniuth, A. T.-M. Lau and N. Spronk, *4<sup>th</sup> Iranian Seminar on Harmonic Analysis and applications (ISHA4)*, Kharazmi University, Tehran, Iran, 20–21 January 2016, 117–120.
2. On two types of approximate identities. *The Extended Abstracts of The AIMC46, Yazd University, Aug. 25–28 2015*, 534–537.
3. On a new notion of injectivity of Banach modules. *The Extended Abstracts of The AIMC46, Yazd University, Aug. 25–28 2015*, 501–504.
4. A variant of Leptin-Herz theorem, *The Extended Abstracts of The 45<sup>th</sup> Annual Iranian Mathematics Conference*, 26–29 August 2014, Semnan University, Iran. 218–220.
5.  $\Delta$ -weak  $\phi$ -amenability of Banach algebras, *The Extended Abstracts of The 44<sup>th</sup> Annual Iranian Mathematics Conference*, 27–30 August 2013, Ferdowsi University of Mashhad, Iran. 351–354.
6.  $C^*$ -graded metric and  $C^*$ -graded sets and a common fixed point theorem, *The Extended Abstracts of the 19<sup>th</sup> Mathematical Seminar On Analysis and its applications*, 19–20 February 2011, University of Mazandaran, Babolsar, Iran. 1–11.

### Submitted Papers

1. Two types of approximate identities depending on the character space of Banach algebras, [arXiv: 1507.05884](#).
2. BSE-property for some certain Segal and Banach algebras, [arXiv:1604.01496v2](#).
3.  $n$ -Jordan multipliers.
4. On a question related to bounded approximate identities of ideals in Banach algebras.

## Final Reports of Research Plans

1. Generalized Multipliers, GKU, November 2016.
2. BSE-Property of some Banach Algebras, GKU, April 2016.

## Workshops and Seminars

1. The 2nd Seminar on Harmonic Analysis and Applications, The Institute for Research in Fundamental Sciences (IPM). Tehran, Iran. January 5-7, 2014.
2. Workshop on harmonic analysis and Banach algebras, IPM, Tehran, Iran, 2013.
3. Workshop on operator structure of Fourier algebra, IPM, Tehran, Iran, 2012.
4. Workshop on mathematical history, Tarbiyat Moalem University. Tehran, Iran, 2006.

## Talks

1. On a certain Banach algebra related to the group algebra, AIMC48, Hamedan University, Aug. 22-25 2017, Hamedan, Iran.
2. On the Converse of a Theorem Due to B. Forrest, E. Kaniuth, A. T.-M. Lau and N. Spronk, ISHA4, Kharazmi University, 20-21 January 2016, Tehran, Iran.
3. On a new notion of injectivity of Banach modules. AIMC46, Yazd University, Aug. 25-28 2015, Yazd, Iran.
4. On two types of approximate identities. AIMC 46, Yazd University, Aug. 25-28 2015, Yazd, Iran.
5. A variant of Leptin-Herz theorem, AIMC45, Semnan University, August 26-29, 2014, Semnan, Iran.
6.  $\Delta$ -weak  $\phi$ -amenability and its relation with Helemskii's problem. Kharazmi University of Tehran. 25 May 2014.
7. The homology of Banach modules based on a character. Kharazmi University of Tehran. 11 May 2014.
8. The homology of Banach modules, Weakly seminar of mathematics. Kharazmi University of Tehran. 4 May 2014.
9.  $\Delta$ -weak  $\phi$ -amenability of Banach algebras, AIMC44, Ferdowsi University, August 27-30, 2013, Mashhad, Iran.
10. Some remarks on  $C^*$ -graded metric spaces, Weakly seminar of mathematics. Kharazmi University of Tehran. October 2010.

## Book

1. Hilbert Spaces in Functional Analysis (In persian, freely available at <http://www.m-fozouni.ir/personal-information/>).

## Responsibilities and Positions

1. Head of the department of mathematics, Gonbad Kavous University, 2016-present.
2. Expert of the recruitment office (for faculty member) in Gonbad Kavous University, 2015-present.
3. Assistant professor of mathematics (full time), Gonbad Kavous university, 2015-present.
4. Lecturer of mathematics (part time), Payam Nour University, Gonbad Kavous Branch, 2015 (one semester).
5. Lecturer of mathematics (part time), Gonbad Kavous University, 2013-2014.
6. Lecturer of mathematics (part time), Islamic Azad University, North Tehran Branch, 2012-2013.

## Taught Courses

1. Mathematical analysis 3 as TA (Kharazmi University, 2007–2008).
2. Calculus 1,2,3 (Islamic azad university, North Tehran branch, 2011–2012).
3. Applied mathematics 1,2 (Gonbad Kavous University, 2012–2013).
4. General topology (Gonbad Kavous University).
5. Algebraic Topology (Gonbad Kavous and Payamnour University).
6. Foundation of Computer (Mohammad Prophet Excellent High School, 2013–2014).
7. Mathematics 3 (Mir Habibi Excellent Middle School, 2013– 2014).
8. Foundation of Geometry (Gonbad Kavous University).
9. Dynamical Systems (Gonbad Kavous University).
10. Foundation of Mathematical Analysis (Gonbad Kavous University).
11. Mathematics Education (Gonbad Kavous University).
12. Complex Functions (Gonbad Kavous University).

## Languages

1. **Persian:** Maternal.
2. **English:** MSRT, 60/100.

## M. Sc. Student

1. Advisor of B. Makhtoom Nezhad, On the Auslander-Reiten Conjecture for Cohen-Macaulay Rings and Path Algebras. January 2017, Gonbad Kavous University.
2. Advisor of R. Daneshmand Khosravy, On the Relative Commutativity Degree of a Subgroup of a Finite Group. December 2016. Gonbad Kavous University.

## Certifications

1. Using proper scientific language (Elsevier Publishing Campus (EPC)).
2. Structuring your article (EPC).
3. Preparing your manuscript (EPC).
4. Security in computers and internet (Basic).
5. Power searching with Google.
6. How to write a CV?
7. Foundation of financial markets.
8. JavaScript programming.
9. Creative thinking.

## Computer Skills

1. Typesetting:  $\text{\LaTeX}$ , Xepersian, Microsoft office.
2. Website Design: WordPress, JavaScript, Html.
3. Internet (Advance).

## Avocations

1. Sport: Futsall, Basketball, Paragelayder.
2. Cinema.
3. Philosophy.
4. Psychology.

## Services for International Communities

1. Referee for *Int. J. Nonlinear Anal. Apl.*
2. Reviewer of Mathematical Review (*MathSciNet*)(Number 102308).

## Reviewed items

1. MR3189300. Bhatt, S. J.; Dabhi, P. A.; Dedania, H. V. On the  $*$ -semisimplicity of the  $\ell^1$ -algebra on an abelian  $*$ -semigroup. *Bull. Aust. Math. Soc.* 88 (2013), no. 3, 492–498.
2. MR3292065 Abtahi, F.; Khodsiani, B.; Rejali, A. Arens regularity of inverse semigroup algebras. *Bull. Iranian Math. Soc.* 40 (2014), no. 6, 1527–1538. 43A20 (46H05)
3. MR3337220. Nemati, Mehdi, Some homological properties of Banach algebras associated with locally compact groups. *Colloq. Math.* 139 (2015), no. 2, 259–271.

4. MR3414774. Anousheh, F; Ebrahimi Bagha, D; Bodaghi, A, Weak amenability for the second dual of Banach modules. (English summary) *Open Math.* 13 (2015), 633–670.
5. MR3422882. Arslan, Berna; Inceboz, Hulya, A generalization of the  $n$ -weak module amenability of Banach algebras. *Semigroup Forum* 91 (2015), no. 3, 625–640.
6. MR3557138. Sahami, A.; Pourabbas, A., Approximate biprojectivity and  $\phi$ -biflatness of certain Banach algebras. *Colloq. Math.* 145 (2016), no. 2, 273–284.
7. MR3546993. Soroushmehr, M. Pointwise version of contractibility over group algebras and its applications. *Semigroup Forum* 93 (2016), no. 2, 211–224.
8. MR3577866. Crann, Jason. On hereditary properties of quantum group amenability. *Proc. Amer. Math. Soc.* 145 (2017), no. 2, 627–635.
9. MR3630163. Nasr-Isfahani, Rasoul; Nemati, Mehdi; Soltani Renani, Sima. Homological properties of Banach modules over abstract Segal algebras. *Math. Slovaca* 67 (2017), no. 1, 191–198.

## Genealogy or Ancestors

1. Mohammad Fozouni (KHU; Kharazmi University of Tehran).
2. Javad Laali (TMU 1994) (My Ph. D supervisor).
3. Alireza Medghalchi (University of Sheffield 1982) (My M. Sc supervisor).
4. John Sydney Pym (University of Cambridge).
5. John Hunter Williamson (University of Cambridge 1953).
6. Frank Smithies (University of Cambridge 1937).
7. Godfrey Harold Hardy (M.A. University of Cambridge).
8. Edmund Taylor Whittaker (University of Cambridge 1895).
9. Andrew Russell Forsyth (University of Cambridge 1881).
10. Arthur Cayley (Ph.D. / Ph.D. / Dr Sc. University of Oxford / University College Dublin / Universiteit Leiden 1864/1865/1875).
11. William Hopkins (M.A. University of Cambridge 1830).
12. Adam Sedgwick (M.A. University of Cambridge 1811).
13. Thomas Jones (M.A. University of Cambridge 1782).
14. Thomas Postlethwaite (M.A. University of Cambridge 1756).
15. Stephen Whisson (M.A. University of Cambridge 1742).
16. Walter Taylor (M.A. University of Cambridge 1723).
17. Robert Smith (M.A. University of Cambridge 1715).
18. Roger Cotes (M.A. University of Cambridge 1706).
19. Isaac Newton (M.A. University of Cambridge 1668).

20. Isaac Barrow (M.A. University of Cambridge 1652).
21. Vincenzo Viviani (Università di Pisa 1642).
22. Galileo Galilei (Università di Pisa 1585).
23. Ostilio Ricci (Università di Brescia).
24. Nicolò Fontana Tartaglia ( Biography: Born: 1500 in Brescia, Republic of Venice (now Italy) Died: 13 Dec 1557 in Venice, Republic of Venice (now Italy).

The genealogy information obtained from the *Mathematics Genealogy Project* by Department of Mathematics, North Dakota State university, in association with the American Mathematical Society at the following address

<http://genealogy.math.ndsu.nodak.edu/>

## Erdős Number

My Erdős Number is 4 by the following chain;

1. Mohammad Fozouni
2. Javad Laali
3. John. S. Pym
4. Neil. B. Hindman
5. Paul Erdős

Reference: MathSciNet

What is the Erdős Number? Click Here.

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