Curriculum Vitae



Hosein Fazaeli Moghimi

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Biography

I was born in Mashhad, the north east of Iran, on 30 May 1975. I am married and have two sons, Erfan and Ehsan.

Education

- Ph.D. in Pure Mathematics- Algebra-Department of Mathematics- Faculty of Mathematics and Computer Science- Shahid Bahonar University of Kerman- Kerman-Iran: September 1999-June 2003
- M.Sc. in Pure Mathematics- Algebra-Department of Mathematics- Faculty of Mathematics and Computer Science- Shahid Bahonar University of Kerman- Kerman-Iran: September 1997-June 1999
- B.Sc. in Mathematics (Teacher Training)- Department of Mathematics-Faculty of Science-Teacher Training University of Tabriz (Azarbayejan) -Tabriz-Iran: September 1993-June 1997

Work Experience

- Associate Professor: April 2014-present
- Assistant Professor: November 2003- April 2014
- Research Center for Training and Educating -Ministry of Education- Mathematics
 Branch- Kerman-Iran: September 2001- June 2002
- Higher Education Center for Teachers- Ministry of Education-Kerman-Iran-September 2001-June 2002
- Teaching Assistant-Shahid Bahonar University of Kerman:2001-2003(part time)

Research Interest

- Commutative Ring Theory (Prime Ideals, Krull dimension and Their Generalizations)
- Module Theory over Commutative Rings (Free Modules, Multiplication Modules, Finitely Generated Modules, Projective Modules, Injective Modules, and etc.)
- Prime and Primary Submodules and Their Generalizations, Various Types of Radicals
 of Submodules, Primary-like submodules (we defined this concept which is a
 generalization of primary ideals), Quasi-primary submodules (we defined this
 concept which is a generalization of quasi-primary ideals) and quasi-primary
 decomposition
- n Absorbing Ideals and the n-Krull dimension of a commutative ring (we introduced the n-Krull dimension as the supremum of lengths of n-absorbing ideals. The 1-Krull dimension of a ring is just the usual Krull dimension)
- Topological Aspect of Rings and Modules (Zariski Topology and Generalizations)
- Graph Theoretical Aspect of Rings and Modules (Zero-Divisor Graphs)
- Categorical Aspect and Lattice Theoretical Aspect of Rings and Modules

Honors

- Outstanding Researcher University of Birjand-2004
- Outstanding Researcher -University of Birjand-2014

Administrative Experience

- Assistant of Department (6 years)
- Head of Department (2 years)
- Associate Dean for the Faculty of Science in Administrative and Financial Affairs (19 months)

Supervisor

- M.Sc. Students: Narges Roozbakhsh- Fatemeh Moazeni-Ameneh Ghasemnejad-Maryam Ajami-Mahdieh Moghimian-Seyedeh Mahboobeh Vahabi-Mahmood Zahmatkesh Sangani-Somayeh Soleymanpoor Ajaghan-Faezeh Shahsaver-Somayeh Abbasi- Mohammad Halimi-Fatemeh Taheri- Jafar Laki Mahaleh-Seyedeh Roya Razavinejad-Batool Zarei Jalalabadi-Nasrin Sarvghad-Maliheh Mahmoodi Maymand-Fatemeh Barzegar- Morteza Noferesti- Zahra Khalafi- Zeinab Zadmehr- Malihe Moosazadeh Aval
- Ph.D. Students: Mahdi Samiei- Fatemeh Rashedi- Sadegh Rahimi Naghani- Javad Bagheri Harehdashti, Batool Zarei Jalal Abadi

Advisor

- M.Sc. Students: Mahdi Samiei- Zohreh Shirghazi- Reyhaneh Ataeipoor- Iman Azizzadeh Dashti- Morteza Lotfi- Zakiey Deldar Ziarat- Toktam Hosseinzadeh- Fatemeh Shafaei-Jafar Ramezani- Eisa Dar- Mahboobeh Rostamzadeh- Alireza Seddighi- Reyhan Ahmadi Bootehgaz- Saeid Kakaabdollah- Hassan Yari Nodar- Reza Abdolinasab-Mahboobeh Zolfaghari- Farideh Shafiei- Razye Khosravi
- Ph.D. Students: Abdolghafoor Allahyari, Mohammad Hassan Anjom Shoa, Alireza Seddighi

Research Projects

- H. Fazaeli Moghimi, Reza Allahyari, *Generalized Structures (Generalized Groups and Quasi-Modules)*, April 2006- March 2007
- O. Rabiei Motlagh, H. Fazaeli Moghimi, M. Aman, An Internal evaluation for the Department of Mathematics-University of Birjand, December 2007- October 2008
- H. Fazaeli Moghimi, Radicals and Varieties of Submodules of a Module over a Commutative ring, October 2012- June 2013
- O. Rabiei Motlagh, H. Fazaeli Moghimi, On the Patterns of Pandemic by an Infectious Disease Under Cross Immunity-Hospitality Conditions in a SIR Model, October 2012-March 2013

Teaching

- Undergraduate Courses: General Mathematics 1 & 2- Elemetary Set Theory-Foundations of Algebra (Algebra 1)- Algebra (Algebra 2)- Basic Number Theory-Boolean Algebra and Computer Science- Basic Algebraic Geometry
- Master Courses: Advanced Algebra- Commutative Algebra 1- Category Theory- Theory
 of Rings and Modules (Non-Commutative Aspect), Homological Algebra, Algebraic
 Topology
- Ph.D. Courses: Commutative Algebra 2- Special Topics in Commutative Algebra- Prime Submodules and Related Topics

Publications

1 M. R. Molaei, H. Fazaeli Moghimi, *Generalized Local Groups*, Pure Mathematics and Applications, Pure Mathematics and Applications: Algebra and Theoretical Computer Science, 12(4) 425-429, 2002

- 2 H. Fazaeli Moghimi, M. R. Molaei, *Quasi Modules*, Pure Mathematics and Applications: Algebra and Theoretical Computer Science, 13(3) 333-341, 2002
- 3 H. Fazaeli Moghimi, M. R. Molaei, *The Notion of Basis in Quasi-Modules*, Hadronic Journal Supplement, 17(4) 1-9, 2002
- 4 H. Fazaeli Moghimi, M. R. Molaei, *On Completely Simple Semigroups,* Italian Journal of Pure and Applied Mathematics, 17 159-170, 2005
- 5 O. Rabiei Motlagh, H. Fazaeli Moghimi, *A Novel Approach to Modelling of Turbulent Flows*, World Journal of Modeling and Simulation, 6(4) 243-258, 2010
- 6 H. Fazaeli Moghimi, F. Rashedi, *Zariski-like Spaces of Certain Modules*, Journal of Algebraic Systems, 1(2) 101-115, 2013
- 7 M. Samiei, H. Fazaeli Moghimi, *Modules Satisfying the weak Nakayama Property,* Indagationes Mathematicae, 25(3) 553-562, 2014 (ISI)
- 8 H. Fazaeli Moghimi, F. Rashedi, *Primary-like Submodules Satisfying the Primeful Property*, Transactions on Algebra and Its Applications, 1(1) 43-54, 2015
- 9 H. Fazaeli Moghimi, F. Rashedi, A Sheaf Construction on the Primary-like Spectrum of Modules, Scientia Magna, 10(1) 83-92, 2014
- 10 H. Fazaeli Moghimi, F. Rashedi, M. Samiei, A Note on Primary-like Submodules of Multiplication Modules, Journal of Algebra and Related Topics, 2(2) 37-41, 2014
- 11 H. Fazaeli Moghimi, F. Rashedi, A Module Whose Primary-like Spectrum Has the Zariski-like Topology, Proceedings of Institute of Applied Mathematics, 3(1) 32-46, 2014
- 12 H. Fazaeli Moghimi, F. Rashedi, *Radical of Primary-like Submodules Satisfying the Primeful Property*, Palestine Journal of Mathematics, 3(1) 463-467, 2014
- 13 H. Fazaeli Moghimi, F. Rashedi, On a Proper Subclass of Primeful Modules which Contains the Class of Finitely Generated Modules Properly, European Journal of Pure and Applied Mathematics, 8(2) 232-238, 2015
- 14 H. Fazaeli Moghimi, M. Samiei, *Quasi-primary Submodules Satisfying the Primeful Property II*, Hacettepe Journal of Mathematics and Statistics, 44(4) 801-811, 2015 (ISI)
- 15 H. Fazaeli Moghimi, M. Samiei, *Quasi-primaryful Modules*, Asian-European Journal of Mathematics, 8(3) 1550051(1-14), 2015
- 16 H. Fazaeli Moghimi, S. Rahimi Naghani, *On n-Absorbing Ideals and the n-Krull Dimension of a Commutative Ring*, Journal of the Korean Mathematical Society, 53(6) 1225-1236, 2016 (ISI)
- 17 H. Fazaeli Moghimi, M. Samiei, *Quasi-primary Submodules Satisfying the Primeful Property I*, Hacettepe Journal of Mathematics and Statistics, 45(5) 1421-1434, 2016 (ISI)
- 18 H. Fazaeli Moghimi, J. Bagheri Harehdashti, *Mappings Between Lattices of Radical Submodules*, International Electronic Journal of Algebra, 19 35-48, 2016
- 19 H. Fazaeli Moghimi, B. Zarei Jalal Abadi, On (m, n)-Absorbing Ideals of Commutative Rings, Proceedings Mathematical Sciences, 127(2), 251-261, 2017 (ISI)

- 20 S. Rahimi Naghani, H. Fazaeli Moghimi, On Graded 2-absorbing and Graded Weakly 2-Absorbing Ideals of a Commutative ring, Cankaya University Journal of Science and Engineering, 13(2) 11-17, 2016 (ISI)
- 21 B. Zarei Jalal Abadi, H. Fazaeli Moghimi, Homogeneous Idealization and Some Dual Notions Around Comultiplication Modules, Acta Matematica Academie Paedagogiace Nyiregyhaziensis, Accepted
- 22 H. Fazaeli Moghimi, M. Samiei, *Weakly Irreducible Ideals*, Journal of Algebra and Related Topics, 4(2) 9-17, 2016
- 23 H. Fazaeli Moghimi, F. Rashedi, *Modules whose Primary-like Spectrum is a Noetherian Space with Respect to the Zariski-like Topology,* Italian Journal of Pure and Applied Mathematics, 37 273-288, 2017
- 24 J. Bagher Harehdashti, H. Fazaeli Moghimi, A Generalization of the Prime Radical of Ideals in Commutative Rings, Communications of the Korean Mathematical Society, 32(3) 543-552, 2017
- 25 B. Zarei Jalal Abadi, H. Fazaeli Moghimi, On a Generalization of Prime Submodules of a Module over a Commutative Ring, Boletim da Sociedade Paranaense de Matemática, Accepted
- 26 H. Fazaeli Moghimi, F. Rashedi, *Primary-like Submodules and a Scheme over the Primary-like Spectrum of a Module,* Miskolc Mathematical Notes, 18(2) 961-974, 2018 (ISI)
- 27 J. Bagheri Harehdashti, H. Fazaeli Moghimi, *Complete Homomorphisms between Lattices of Radical Submodules*, Mathematical Reports, 20(2) 187-200, 2018 (ISI)
- 28 J. Bagheri Harehdashti, H. Fazaeli Moghimi, When the mapping carrying submodules to their radicals is a lattice homomorphism, International Journal of Pure and Applied Mathematics, 116(2) 353-360, 2017
- 29 B. Zarei Jalal Abadi, H. Fazaeli Moghimi, *The radical-depended graph of a commutative ring*, Annals of the University of Craiova Mathematics and Computer Science series, 45(1) 78-85, 2018
- 30 J. Bagheri Harehdashti, H. Fazaeli Moghimi, *Saturations of submodules with respect to subsets of a ring,* Proyecciones Journal of Mathematics, 37(2) 213-221, 2018
- 31 M. Samiei, H. Fazaeli Moghimi, *Quasi-Zariski topology on the quasi-primary spectrum of a module*, Jordan Journal of Mathematics and Statistics, 10(4) 319-345, 2017
- 32 H. Fazaeli Moghimi, M. Samiei, *Generalized quasi-primary rings*, , Advanced Studies in Contemporary Mathematics, 28(4), 607-613, 2018

Conference Papers

- 1 H. Fazaeli Moghimi, M. R. Molaei, Completely simple semi-modules, 35th Annual Iranian Mathematics Conference, Shahid Chamran University, Ahvaz (2005)
- 2 H. Fazaeli Moghimi, M. R. Molaei, Characterization of completely simple semigroup of order 4 by direct product, 17th Algebra Seminar, Sistan and Balouchestan University, Zahedan (2006)
- 3 H. Fazaeli Moghimi, Ameneh Ghasemnejad, Some remarks on the ideal $\theta(M)$, 19th Algebra Seminar, Semnan University, Semnan (2008)

- 4 H. Fazaeli Moghimi, Maryam Ajami, Some remarks on the Zariski spaces, 39th
 Annual Iranian Mathematics Conference, Shahid Bahonar University of Kerman,
 Kerman (2008)
- 5 H. Fazaeli Moghimi, Mahmood Zahmatkesh Sangani, Right index and left index of a completely simple semigroups, 39th Annual Iranian Mathematics Conference, Shahid Bahonar University of Kerman, Kerman (2008)
- 6 H. Fazaeli Moghimi, Adjoint situations between radical and Zariski functors, 5th Commutative Algebra Seminar and Related Topics, Isfahan University of Technology, Isfahan (2008)
- 7 H. Fazaeli Moghimi, The preservation of exact sequences of modules by radical and Zariski functors, 20th Algebra Seminar, Kharazmi Univesity, Karaj (2009)
- 8 H. Fazaeli Moghimi, Reduced and module-reduced primary decomposition, 40th
 Annual Iranian Mathematics Conference, Sharif University of Technology, Tehran
 (2009)
- 9 H. Fazaeli Moghimi, Somayeh Soleymanpoor Ajaghan, Primary decomposition and Idealization of a module, 40th Annual Iranian Mathematics Conference, Sharif University of Technology, Tehran (2009)
- 10 H. Fazaeli Moghimi, On saturation of submodules of modules over commutative rings, International Algebraic Conference dedicated to the 70th birthday of Antoly Yakovlev, St. Petersburg Department of Steklov Mathematical Institute, St. Petersburg, Russia (2010)
- 11 F. Shahsavar, M. Nazari, H. Fazaeli Moghimi, Torsion modules over onedimensional domains, 41th Annual Iranian Mathematics Conference, Urmia University, Urmia (2010)
- 12 H. Fazaeli Moghimi, M. Halimi, S. Abbasi, On radicals of primary submodules of modules over commutative rings, 41th Annual Iranian Mathematics Conference, Urmia University, Urmia (2010)
- 13 H. Fazaeli Moghimi, F. Shahsavar, M. Nazari, On submodule- based zero-divisor graph of a module over a commutative ring, 41th Annual Iranian Mathematics Conference, Urmia University, Urmia (2010)
- 14 S. Abbasi, M. Halimi, H. Fazaeli Moghimi, On saturation of submodules of multiplication modules, 41th Annual Iranian Mathematics Conference, Urmia University, Urmia (2010)
- 15 H. Fazaeli Moghimi, F. Shahsavar, M. Nazari, Submodule- based zero-divisor graph of certain Abelian groups, 21th Algebra Seminar, University of Tabriz, Tabriz (2010)
- 16 H. Fazaeli Moghimi, M. Samiei, F. Rashedi, On saturation of certain submodules, 22th Algebra Seminar, Hakim Sabzevari University, Sabzevar (2012)
- 17 F. Rashedi, M. Samiei, H. Fazaeli Moghimi, Saturation and homogeneous idealization, 43th Annual Iranian Mathematics Conference, University of Tabriz, Tabriz (2012)

- 18 M. Samiei, F. Rashedi, H. Fazaeli Moghimi, Some results on quasi-primary ideals, 43th Annual Iranian Mathematics Conference, University of Tabriz, Tabriz (2012)
- 19 M. Samiei, H. Fazaeli Moghimi, Quasi 2-absorbing submodules of certain modules, 23th Algebra Seminar, Faculty of Mathematics and Computer Science of Khansar, Khansar (2013)
- 20 F. Rashedi, H. Fazaeli Moghimi, When the radicals of primary submodules satisfying the radical condition is prime, 23th Algebra Seminar, Faculty of Mathematics and Computer Science of Khansar, Khansar (2013)
- 21 F. Rashedi, H. Fazaeli Moghimi, N. Sarvghad, On radicals of primary submodules satisfying the primeful property, 44th Annual Iranian Mathematics Conference, Ferdowsi University of Mashhad, Mashhad (2013)
- 22 H. Fazaeli Moghimi, M. Mahmoodi Maymand, Quasi- 2 absorbing submodules of multiplication modules, 2th Electronic National Conference on the Role of Mathematics in Development of Science, Jahrom University (2014)
- 23 H. Fazaeli Moghimi, J. Bagheri Haredashti, F. Barzegar, Finitely Content Modules, 45th Annual Iranian Mathematics Conference, Semnan University, Semnan (2014)
- 24 F. Rashedi, H. Fazaeli Moghimi, M. H. Rezaei gol, A Zariki topology on the Primary-like Spectrum of ϑ -Multiplication Modules, 45th Annual Iranian Mathematics Conference, Semnan University, Semnan (2014)
- 25 B. Zarei Jalalabadi, H. Fazaeli Moghimi, A generalization of zero-divisor graphs based on the radical of ideals, 24th Algebra Seminar, Kharazmi Univesity, Karaj (2014)
- 26 Z. Zadmehr, H. Fazaeli Moghimi, On the residual of a submodule by a free module of finite rank, The 8th Seminar on Linear Algebra and Its Applications, University of Kordistan, Sananndaj (2015)
- 27 Z. Khalafi, H. Fazaeli Moghimi, On chains of prime submodules of a finitely generated module, The 8th Seminar on Linear Algebra and Its Applications, University of Kordistan, Sananndaj (2015)
- 28 H. Fazaeli Moghimi, A Zariski topology on the primary-like spectrum of top-like modules, International Conference on Recent Advances in Pure and Applied Mathematics (ICRAPAM 2015), Istanbul Commerce University, Istanbul, Turkey (2015)
- 29 H. Fazaeli Moghimi, Ideal Stable Modules, 25th Iranian Algebra Seminar, Hakim Sabzevari University, Sabzevar (2016)

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