



Ali Akbar Estaji
Sabzevar
P.O.Box: 397
PostalCode:
9617976487
Iran

Ali Akbar Estaji

About me I have PHD in Topology and Algebra and I am interested into studying and publishing articles about general topology and point-free topology.

Current position

Professor,

Faculty of Mathematics and Computer Sciences,
Hakim Sabzevari University,
P.O. Box 397,
Postal Code 9617976487,
Sabzevar,
Iran.

aaestaji@hsu.ac.ir

<http://profs.hsu.ac.ir/estaji/>

Birth Date

Saturday, December 22, 1962, Sabzevar, Iran

Nationality and Native Language

Iranian , Persian

Areas of specialization

Ring of continuous functions

Frame (Pointfree topology)

Education

1999-2001: PHD in Mathematical Algebra,

Dept. Math. Chamran University, Ahvaz, Iran

1989-1991: MSc in Mathematical Algebra

Dept. Math. Chamran University, Ahvaz, Iran

1984-1987: B.Sc. in Pure Mathematics

Birjand University, Birjand, Iran.

Teaching Fields

- Rings and Modules
- Commutative algebra
- Topology
- Frame and Stone spaces
- Lattice theory

Membership of societies

[Iranian Mathematical Society](#)

Journal articles

2003 A.A. Estaji and O. A. S. Karamzadeh, On $C(X)$ Modulo its Socle, *Communications in Algebra* Volume 31, Issue 4, 1561–1571.

2007 A.A. Estaji, On π -self-injectivity, *Far East Journal of Mathematical Sciences (FJMS)* Volume 25, Issue 2, 375–384.

2008 A.A. Estaji, On Almost Discrete Space, *Archivum Mathematicum (BRNo)* 44, 6976.

2010a A.A. Estaji and M. Shabani, A note on multiplication S -act, *Far East Journal of Mathematical Sciences (FJMS)* Volume 36, Issue 2, 133–150.

2010b Ali Akbar Estaji and Melvin Henriksen, On a -Kasch space, *Archivum Mathematicum*, Vol. 46, No. 4, 251262.

2011a Ali Akbar Estaji, Somayeh Khodaii and Solmaz Bahrani, On rough set and fuzzy sublattice, *Information Sciences* 181 (2011) 3981–3994.

2011b A.A. Estaji and S. Tajnia, Prime Subacts Over Commutative Monoids with Zero, *Lobachevskii Journal of Mathematics*, Vol. 32, No. 4, pp. 358365.

2012a Ebrahim Hashemi and Ali Akbar Estaji, On polynomials over abelian rings, *Vietnam Journal of Mathematics* 40:1, 47-55.

2012b Ali Akbar Estaji and Hamed Zeinaliyan, Fuzzy Primary and Fuzzy P -primary Subacts *World Applied Sciences Journal* 16 (11): 1571–1577.

2012c A.A. Estaji, M.R. Hooshmandasl, B. Davvaz, Rough set theory applied to lattice theory, *Information Sciences* 200, 108122.

2012d Ali Akbar Estaji, z -Weak Ideals and Prime Weak Ideals, *Iranian Journal of Mathematical Sciences and Informatics* Vol. 7, No. 2, 53-62.

2013 Ali Akbar Estaji, Ali Saghafi Khorasani and Samaneh Baghdari, Multiplication ideals in Γ -rings, *Journal of Hyperstructures* 2 (1), 30-39.

2014a A.A. Estaji, A. As. Estaji, A. S. Khorasani, S. Baghdari, On multiplication Γ -modules, *Ratio Mathematica*, 26, 21-38.

2014b Ali Akbar Estaji and Ali Asghar Estaji, Some results on Noetherian semigroup, *Journal of Algebra and Related Topics*, Vol. 2, No 1, 43-53.

- 2015a** A.A. Estaji, A. Karimi Feizabadi, M. Abedi, Zero sets in pointfree topology and strongly z -ideals, *Bull. Iranian Math. Soc.*, Vol. 41, No. 5, 1071-1084.
- 2015b** A.A. Estaji, T. Haghdadi, and A. As. Estaji, Zero divisor graphs for S -act, *Lobachevskii Journal of Mathematics*, Vol. 36, No. 1, 18.
- 2015c** Ali Akbar Estaji, Masomeh Shabani, Some notes on quasi P -rings, *Transactions on Algebra and its Applications*, 1 (1), 19-26.
- 2015d** A.A. Estaji, A. Karimi Feizabadi, M. Abedi, Strongly fixed ideals in $C(L)$ and compact frames, *Archivum Mathematicum*, 51, 112.
- 2015e** Ali Akbar Estaji, Ali Asghar Estaji, Nexus over an Ordinal, *Journal of Uncertain Systems* Vol.9, No.3, 183-197.
- 2015f** A. Karimi Feizabadi, A.A. Estaji, M. Abedi, *Pointless form of rough sets*, Kyungpook Math. J., 55, 549-562.
- 2015g** A. A. Estaji, T. Haghdadi and J. Farokhi, *Fuzzy nexuse over ordinal*, Journal of Algebraic Systems Vol. 3, No. 1, (2015), 65–82
- 2016a** A.A. Estaji, A. Karimi Feizabadi, and M. Zarghani, *The ring of real-continuous functions on a toposframe*, Categories and General Algebraic Structures with Applications, Volume 4, Number 1, February 2016, 75–94.
- 2016b** R. A. Borzooei, A.A. Estaji and M. Mobini, *On the category of rough sets*, Soft Comput. Online: 05 April 2016.
- 2016c** A. Karimi Feizabadi, A.A. Estaji, and M. Zarghani, The ring of real-valued functions on a frame, *Categories and General Algebraic Structures with Applications*, Volume 5, Number 1, July 2016, 85-102.
- 2017a** A. Karimi Feizabadi, A.A. Estaji, and B. Emamverdi, *\mathcal{RL} -valued f -ring homomorphisms and lattice-valued maps*, Categories and General Algebraic Structures with Applications, Volume 7, Special issue on the Occasion of Banaschewskis 90th Birthday, July 2017, 141–163.
- 2017b** A.A. Estaji, A. Karimi Feizabadi, and M. Zarghani, *Zero elements and z -ideals in modified pointfree topology*, Bull. Iranian Math. Soc., 43 (2017), No. 7, 2205–2226.
- 2018a** A.A. Estaji, A. Karimi Feizabadi and M. Abedi, *Intersection of essential ideals in the ring of real-valued continuous functions on a frame*, Journal of Algebraic Systems, Vol. 5, No. 2, (2017), pp 149-161
- 2018b** A. As. Estaji, E. Hashemi and A. A. Estaji, *On Property (A) and socle of the f -ring $Frm(\mathcal{P}(\mathbb{R}), L)$* , Categories and General Algebraic Structures with Applications, Volume 8, Number 1, January 2018, 61–80.

- 2018c** A. Karimi Feizabadi, A. A. Estaji and M. Abedi *On minimal ideals in the ring of real-valued continuous functions on a frame*, *Archivum Mathematicum*, Vol. 54 (2018), No. 1, 113.
- 2018d** A. A. Estaji, A. Karimi Feizabadi and B. Emamverdi, *Representation of real Riesz maps on a strong f -ring by prime elements of a frame*, *Algebra Univers.* (2018) 79:14.
- 2018e** A. A. Estaji and F. Bayati, *On Rough Sets and Hyperlattices*, *Ratio Mathematica*, Vol. 34, 2018, pp. 15–33
- 2018f** A.A. Estaji and A. Mahmoudi Darghadam, *On maximal ideals of $\mathcal{R}_\infty L$* , *Journal of Algebraic Systems*, Vol. 6, No. 1, (2018), pp 43–57.
- 2018g** L. Sharifan, A.A. Estaji and G. Malekbala, *Primary decomposition of ideals of lattice homomorphisms*, *The electronic journal of combinatorics* 25(3) (2018).
- 2018h** A. A. Estaji and M. Mobini, *On injectivity in category of rough sets*, *Soft Computing*, <https://doi.org/10.1007/s00500-018-3472-7>.
- 2018i** A. A. Estaji and A. Mahmoudi Darghadam, *Rings of continuous functions vanishing at infinity on a frame*, *Quaestiones Mathematicae* 2018: 1-17, <http://dx.doi.org/10.2989/16073606.2018.1509151>.
- 2018j** Hossien Eghdami, Ali Akbar Estaji, and Toktam Haghddadi, *Fuzzy roughness in Lie algebra by reference point*, *Journal of Intelligent & Fuzzy Systems* 35 (2018) pp. 887–899, DOI:10.3233/JIFS-171620.
- 2018k** A. Karimi Feizabadi, A.A. Estaji, and M. Robot Sarpoushi, *Pointfree topology version of image of real-valued continuous functions*, *Categories and General Algebraic Structures with Applications*, Volume 9, Number 1, July 2018, 59–75.
- 2018l** Ali Akbar Estaji and Mostafa Abedi, *On injectivity of the ring of real-valued continuous functions on a frame*, *Bull. Belg. Math. Soc. Simon Stevin* 25 (2018), 467–480.
- 2018m** Mohammad Zarghania and Ali Akbar Estaji, *A New Pointfree Form of Subspaces*, *Filomat* 32:8 (2018), 2721–2733.
- 2018n** A.A. Estaji, A. Mahmoudi Darghadam and H. Yousefpour, *Maximal Ideals in Rings of Real Measurable Functions*, *Filomat* 32:15 (2018), 5191–5203.
- 2019a** A. A. Estaji, M. Vatandoost and R. Pourkhandani, *Fixed points of covering upper and lower approximation operators* *Soft Computing*, <https://doi.org/10.1007/s00500-019-04113-0>

- 2019b** A.A. Estaji, A. Karimi Feizabadi, and M. Robat Sarpoushi, *z_c -Ideals and prime ideals in the ring \mathcal{R}_cL* , *Filomat*, 32:19 (2018), 6741–6752. <https://doi.org/10.2298/FIL1819741E>
- 2019c** A.A. Estaji and M. Taha, *z -Ideals in the real continuous function ring $\mathcal{R}(L_\tau)$* , *Bulletin of the Iranian Mathematical Society*, <https://doi.org/10.1007/s41980-019-00239-x>.
- 2019d** Mehdi Vatandoost, Ali Akbar Estaji and Rahimeh Pourkhandani, *A generalized modal logic in causal structures*, *Theoret. Comput. Sci.* (2019). <https://doi.org/10.1016/j.tcs.2019.02.006>.
- 2019e** M. Abedi and A.A. Estaji, *Closed ideals in the uniform topology on the ring of real-valued continuous functions on a frame*, *Rend. Sem. Mat. Univ. Padova*, (2019), 1–18.
- 2019f** M. Abedi and A.A. Estaji, *Compactification of completely regular Frames based on their cozero part*, *Mathematical Researches*, 5(1), (1398), 53–66.
- 2019g** A.A. Estaji, M. Abedi and A. Mahmoudi Darghadam, *On self-injectivity of the f -ring $\text{Frm}(\mathcal{P}(\mathbb{R}), L)$* , *Math. Slovaca* 69 (2019), No. 5, 999–1008. <https://doi.org/10.1515/ms-2017-0284>
- 2019h** A.A. Estaji, M. Robat Sarpoushi and M. Elyasi, *Further thoughts on the ring $\mathcal{R}_c(L)$ in frames*, *Algebra Univers.* (2019) 80:43. <https://doi.org/10.1007/s00012-019-0619-z>
- 2020a** A.A. Estaji, A. Karimi Feizabadi and M. Robat Sarpoushi, *Sums of Strongly z -Ideals and Prime Ideals in $\mathcal{R}(L)$* , *Iranian Journal of Mathematical Sciences and Informatics* Vol. 15, No. 1 (2020), 23–34. DOI: 10.21859/IJMSI.15.1.23
- 2020b** A.A. Estaji and A. Mahmoudi Darghadam, *Free ideals and real ideals of the ring of frame maps from $\mathcal{P}(\mathbb{R})$ to a frame*, *Algebraic Structures and Their Applications* Vol. 7 No. 2 (2020), 93–113.
- 2020c** A.A. Estaji and A. Mahmoudi Darghadam, *Rings of frame maps from $\mathcal{P}(\mathbb{R})$ to frames which vanish at infinity*, *Hacet. J. Math. Stat.* 49 (2) (2020), 854–868. DOI: 10.15672/hujms.624015
- 2020d** A.A. Estaji, H. Eghdami and T. Haghdadi, *Category of soft Lie algebra* *Soft Computing* <https://doi.org/10.1007/s00500-019-04583-2>
- 2020e** A.A. Estaji, A.As. Estaji and M. Taha, *On socle and property (A) of the f -ring*,
- 2020f** T. Dube, A.A. Estaji and M. Robat Sarpoushi, *Some relative normality properties in locales*, *Math. Slovaca* 70 (2020), No. 4, 779–794. DOI: 10.1515/ms-2017-0391
- 2020g** M. Elyasi, A. A. Estaji and M. Robat Sarpoushi, *Locally functionally countable subalgebra of $\mathcal{R}(L)$* , *Archivum Mathematicum*, 56 (2020), No. 3, 127–140. <http://dml.cz/dmlcz/148290>

2020h Ali Akbar Estaji and Ahmad Mahmoudi Darghadam, *Free ideals and real ideals of the ring of frame maps from $\mathcal{P}(\mathbb{R})$ to a frame*, Algebraic Structures and Their Applications 7(2) (2020), 93–113.

2021a A.A. Estaji and T. Haghdadi, *On n -absorbing ideals in a lattice*, Kragujevac Journal of Mathematics, 45(4) (2021), 597–605.

2021b Ali Akbar Estaji, Toktam Haghdadi and Javad Farokhi Ostad, *L -ideals and rough sets based on L -ideals*, Knowledge and Information Systems, <https://doi.org/10.1007/s10115-020-01529-1>

2021c H. Yousefpour, A.A. Estaji, A. Mahmoudi Darghadam and G. Sadeghi, *m -topology on the ring of real-measurable functions*, Journal of Algebraic Systems, Vol. 9, No 1, (2021), 83–106. <https://doi.org/10.22044/jas.2020.9557.1470>.

2021d A. A. Estaji and M. Robat Sarpoushi, *On CP-frames*, JART, Vol. 9, No. 1, (2021), 109–119.

2021e Ali Akbar Estaji and Mostafa Abedi, *On regularity and injectivity of the ring of real-continuous functions on a topoframe*, Algebra Univers. (2021) 82:60, <https://doi.org/10.1007/s00012-021-00753-2>

2021f Ali Akbar Estaji, Javad Farokhi Ostad and Toktam Haghdadi, *Base and Weight of Boolean I -Contact Algebras*, Bulletin of the Iranian Mathematical Society, <https://doi.org/10.1007/s41980-021-00583-x>

2021f Ali Akbar Estaji, Maryam Robat Sarpoushi and Ali Barzanouni, *Localic transitivity*, Algebra Univers. Vol. 83 (2022) No 29. <https://doi.org/10.1007/s00012-022-00783-4>

Books

2004 Ali Akbar Estaji, *Algebra of continuous functions*, Sabzevar Tarbiat Moallem University.

1396 Ali Akbar Estaji and Toktam Haghdadi, *Matrix Foundations and Linear Algebra*, 4derakht, 1396.

Seminar articles & Talks

2007a A.A. Estaji, On the Krull intersection theorem for S-act, 18th seminar on Algebra, March. 2007, Basic Science Damghan University, Damghan, Iran.

2007b A.A. Estaji and M. Shabani, Multiplication S-acts, 38 th Annual Iranian Mathematics Conference, 3-6 September 2007, Zanzan University, Zanzan, Iran.

2007c A.A. Estaji, A note on the Noetherian space and Noetherian semi-group, Conference on semigroups, acts and categories June 2007, University of Tartu, Estonia.

2008a A.A. Estaji , F. Namazi and A.A.S. Estaji, Some results on prime S-act, Extended Abstract of 19 th Algebra Semnan,12-13 march 2008 , semnan university, semnan Iran, page 42-45.

- 2008b** A.A. Estaji, A. Saberi and A.A.S. Estaji, The notion of product of two Subacts of multiplication S-act, Extended Abstract of 19 th Algebra Semnan, 12-13 march 2008 , semnan university, semnan , Iran page 38-41.
- 2008c** A.A. Estaji, On the z-ideal of Semigroup $(C(X), \cdot)$, International Conference on Mathematics and Statistics 15-19 June 2008, Athens, Greece.
- 2008d** A.A. Estaji and S. Tajnia, Some result on second and secondary subacts, 39 th Annual Iranian Mathematics Conference, August 2008, Kerman, Iran.
- 2009a** A.A. Estaji and H. Zeinalian, Fuzzy primary subacts, Tarbiat Moallem University, 20th Seminar on Algebra 2-3 Ordibehesht, 1388 (Apr. 22-23, 2009) pp 62-65.
- 2009b** A.A. Estaji and F. Mohammadzadeh, Subacts of Multiplication S-acts, 5th Seminar on Commutative Algebra and Related Topics, Isfahan, Iran, page 6.
- 2009c** A.A. Estaji and Z. Hatamikia, On multiplication s-act, 40th Annual Iranian Mathematics Conference, Sharif University of Technology.
- 2010a** Ali Akbar Estaji, Somayeh Khodaeii, and Solmaz Bahrami, On Rough Set and Fuzzy Sublattice, 21th Algebra Seminar of Iran, 10-11 November 2010, Faculty of Mathematical Sciences, University of Tabriz.
- 2010b** Ali Akbar Estaji, and Elahe Hoseiny, Strongly irreducible subact, 21th Algebra Seminar of Iran, 10-11 November 2010, Faculty of Mathematical Sciences, University of Tabriz.
- 2012** Ali Akbar Estaji, Ali Saghafi Khorasani and Samaneh Baghdari, GCD and LCM of ideals in Γ -rings, Extended Abstracts of the 1st Algebraic Structures Seminar 15th-16th November 2012 Hakim Sabzevari University, Sabzevar, Iran.
- 2013** A.A. Estaji, A. Karimi Feizabadi, M. Abedi, Partitions of a lattice and galois, The Extended Abstracts of The 44th Annual Iranian Mathematics Conference 27-30 August 2013, Ferdowsi University of Mashhad, Iran.
- 2014a** A.A. Estaji, T. Haghdad, and J. Farrokhi Ostad, Fuzzy nexus over an ordinal, Kharazmi University, 24th Iranian Algebra Seminar, 21-22 Aban, 1393 (November 12-13, 2014), pp:65-67.
- 2014b** A.A. Estaji, A. Karimi Feizabadi, M. Abedi, z -filters and zero sets in pointfree topology, Kharazmi University, 24th Iranian Algebra Seminar, 21-22 Aban, 1393 (November 12-13, 2014), pp:11-14.
- 2015a** M. Abedi, A.A. Estaji, A. Karimi Feizabadi, Weakly spatial frames, 46th Annual Iranian Mathematics Conference 25-28 August 2015 Yazd University

2015b A.A. Estaji and M. Zarghani, Pointless form of grills, 8th Seminar on Geometry and Topology, Amirkabir University of Technology, December, 15-17, 2015.

2016a A.A. Estaji and F. Bayati, Approximation of a fuzzy subset on a hyperlattice, 25th Iranian Algebra Seminar, Hakim Sabzevari University, July 20-21, 2016.

2016b A.A. Estaji and M. Robot Sarpoushi, pointfree topology version of image of real-valued continuous functions with finite image, 25th Iranian Algebra Seminar, Hakim Sabzevari University, July 20-21, 2016.

2016c A.A. Estaji, A. Karimi Feizabadi and B. Emamverdi, Realize of lattice valued functions, 4th Seminar on Algebra and its Applications, University of Mohaghegh Ardabili, August 9-11, 2016.

2016d A.A. Estaji, A. Karimi Feizabadi, B. Emamverdi, Bounded Lattice-valued functions, Proceeding of The 47th Annual Iranian Mathematics Conference, Kharazmi University, Karaj, Iran, 28-31 August 2016, page 730-736.

2016e M. Zarghani, A.A. Estaji and A. Karimi Feizabadi, A new pointfree form of topology, Proceeding of The 47th Annual Iranian Mathematics Conference, Kharazmi University, Karaj, Iran, 28-31 August 2016, page 885-889.

PhD Students

2012-2015: Mostafa Abedi, Zero sets in pointfree topology

2013-2017: Mohammad Zarghani, The ring of real continuous functions on a topoframe

2013-2018: Ahmad Mahmoudi Darghadam, Rings of continuous functions vanishing at infinite on a frame

2013-2017: Batool Emamverdi, Lattice-valued functions and cozero maps

2014-2017: Maryam Robot Sarposhi, Pointfree version of continuous functions with countable image

2015-2020: Hasan Yousefpour, The pointfree version of real measurable functions

2016-2021: Mahtab Elyasi, Pointfree topology version of continuous functions with locally countable image

2020-...: Maryam Taha,