



CURRICULUM VITAE

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Date of birth: 22 May 1983
Marital status: Married



Education/Qualifications

2001-2005 **B. Sc. in Mathematics**, School of Mathematics, Statistics and Computer Sciences, Department of Mathematics, University of Tehran, Tehran, Iran.
Project topic: Study on sporadic groups.
(Supervisor: Prof. Mohammad Reza Darafsheh)

2005-2007 **M. Sc. in Mathematics**, Department of Mathematical Sciences, Isfahan University of Technology, Isfahan, Iran
Thesis topic: On the linear representations of symmetry groups of nanotubes
(Supervisor: Prof. Bijan Taeri)

2010-2015 **Ph. D in Mathematics**, Department of Mathematical Sciences, Isfahan University of Technology, Isfahan, Iran
Thesis topic: n -Cayley digraphs on over finite groups.
(Supervisor: Prof. Bijan Taeri)

2016-2017 **Post-Doctoral in Mathematics**, Department of Mathematics, Faculty of Sciences, Isfahan University, Isfahan, Iran
(Supervisor: Prof. Alireza Abdollahi)

Employment to Date/Work Experience

2017-present University of Larestan
Post: *Assistant Professor*

Languages English: good.

Other Skills Computer literate: Windows applications. Softwares: GAP, Mathematica. Latex.

Publications

- Journal Papers

2019

- **M. Arezoomand**, *A note on the eigenvalues of n -Cayley graphs*, *Matematicki Vesnik*, accepted.
- **M. Arezoomand**, *On the walks on Cayley graphs*, *Facta Universitatis, Series: Mathematics and Informatics*, accepted.
- **M. Arezoomand**, *On the eigenvalues of n -Cayley graphs, a survey*, *Facta Universitatis, Series: Mathematics and Informatics*, accepted.
- **M. Arezoomand**, *On the Laplacian and signless Laplacian polynomials of graphs with semiregular automorphisms*, *Journal of Algebraic Combinatorics*, 2019, <https://doi.org/10.1007/s10801-019-00890-x>
M. Arezoomand, *On finite groups that all their semi-Cayley graphs are quasi-abelian*, *Math. Interdisc. Res.* 3(2) (2018)131-134.



- **M. Arezoomand**, A. Abdollahi and P. Spiga, *On problems concerning fixed-point-free permutations and on the polycirculant conjecture-a survey*, Trans Comb., 8(1) (2019) 15-40.
- 2018**
- **M. Arezoomand** and B. Taeri, *Finite groups admitting a connected cubic integral bi-Cayley graph*, Alg. Struc. Appl., 5(2) (2018) 35-43.
 - **M. Arezoomand**, *Non-normal p -bicirculants, p a prime*, Matematicki Vesnik, 70(4) (2018), 338-343.
 - A. Abdollahi and **M. Arezoomand**, *Finite nilpotent groups that coincide with their 2-closures in all of their faithful permutation representations*, J. Algebra Appl., 16(11) 2018, 1-11.
- 2016**
- **M. Arezoomand** and B. Taeri, *Which elements of a finite group are non-vanishing*, Bull. Iranian Math. Soc., 42(5) (2016) 1097-1106.
 - **M. Arezoomand** and B. Taeri, *Finite BCI-groups are solvable*, Int. J. Group Theory, 5(2) (2016) 1-6.
- 2015**
- **M. Arezoomand** and B. Taeri, *A classification of finite groups with integral bi-Cayley graphs*, Trans. Comb., 4(4) (2015) 55-61.
 - **M. Arezoomand** and B. Taeri, *On the normality of 2-Cayley digraphs*, Discrete Math. 338 (2015) 41-47.
 - **M. Arezoomand** and B. Taeri, *Isomorphisms of finite semi-Cayley graphs*, Acta Math. Sin. Eng. Ser., 31(4) (2015) 715-730.
- 2014**
- **M. Arezoomand** and B. Taeri, *Schultz and Modified Schultz Indices of Generalized Hierarchical Product of Graphs*, Topics in Chemical Graph Theory, Univ. Kragujevac, Kragujevac, 2014, pp. 55-68.
- 2013**
- **M. Arezoomand** and B. Taeri, *On the characteristic polynomial of n -Cayley digraphs*, Electronic J. Combin., 20(3) (2013), #P57, 1-14.
 - **M. Arezoomand** and B. Taeri, *Zagreb Indices of the Generalized Hierarchical Product of Graphs*, Match Commun. Math. Comput. Chem. 69(2013) 131-140.
- 2012**
- M. Taghizadeh, **M. Arezoomand** and H. Gazor, *Computation of full symmetry group of $C4C8(R)$ nanotubes using a mathematical model*, Optoelectron. Adv. Mat. 6 (2012) 1046-1048.
 - M. Taghizadeh, **M. Arezoomand** and H. Gazor, *A new method for computing distance-based topological indices of $C4C8(R)$ nanotubes*, Journal of Optoelectronic and Biomedical Materials. 4(4) (2012) 65-69.
- 2011**
- **M. Arezoomand** and B. Taeri, *A new method for computing the Wiener index of polyhex nanotorus*, J. Comp. Theoer. NanoSci. 8(1) (2011) 2350-2355.
 - **M. Arezoomand**, *Random walks on finite $C4C8(S)$ net, nanotube and nanotori*, Match Commun. Math. Comput. Chem. 65 (2011) 231-240.
 - **M. Arezoomand** and B. Taeri, *On the distance-based topological indices of polyhex nanotori*, Match Commun. Math. Comput. Chem 65(2011) 241-248.
- 2010**
- **M. Arezoomand** and B. Taeri, *Applications of generalized hierarchical product of graphs in computing the szeged index of chemical graphs*, Match Commun. Math. Comput. Chem 65(2010) 591-602.
- 2009**
- **M. Arezoomand** and B. Taeri, *The Full Non-rigid Group Theory of cis-tetraamminedichlorocobalt (III)*, Asian J. Chem. 21 (2) (2009), 869-878.
 - **M. Arezoomand** and B. Taeri, *The full symmetry and irreducible representations of nanotori*, Acta Cryst. A65 (2009) 249-252.



- **M. Arezoomand** and B. Taeri, *Full Non-Rigid Group of Di-mu-oxo-bis(tetraamine manganese(II)) as a Wreath Product*, MATCH Commun. Math. Comput. Chem. 62 (2009) 275-284.
- **M. Arezoomand** and B. Taeri, *A mathematical model for TUC4C8(S) nanotubes and their symmetry groups*, J. Geom. Phys. 59 (2009) 1168-1174.
- **M. Arezoomand** and B. Taeri, *Full non-rigid group of 2,3,5,6-Tetra-methylepyrazine as wreath product*, J. Appl. Math. Informatics 27(2009), 915 - 931.
- **M. Arezoomand**, *Energy and Laplacian spectrum of C4C8(S) nanotori and nanotube*, Digest journal of nanomaterials and biostructures, 4(6)(2009) 899-905.
- **M. Arezoomand**, *On the distance based topological indices of fullerene and fullerenyl anions having dendrimer units*, Digest journal of nanomaterials and biostructures, 4(4) (2009) 713-722.

2008

- **M. Arezoomand** and B. Taeri, *The Full Non-Rigid Group Theory for TBA (Tert-Butyl Alcohol)* J. Iranian Chem. Soc. 5 (3) (2008) 514-518.

- Conference Papers

2019

- **M. Arezoomand**, M. Aminian and M. A. Iranmanesh, *Recent trends and future directions on isomorphisms of Cayley graphs*, 11th Iranian Group Theory Conference, 30-31 Jan. Yazd, Iran, 2019.
- M. Ghasemi and **M. Arezoomand**, *Normality of one-matching semi-Cayley graphs*, International Conference on Recent Achievements in Mathematical Sciences, 14-18 Jan, Yazd, Iran, 2019.
- **M. Arezoomand** and M. A. Iranmanesh, *On the number of walks on semi-Cayley graphs*, International Conference on Recent Achievements in Mathematical Sciences, 14-18 Jan, Yazd, Iran, 2019.

2018

- **M. Arezoomand**, *On the applications of representation theory in computing of eigenvalues of Graphs having semiregular subgroup of automorphisms*, 3th Conference on Computational Group Theory, Number Theory and Applications, 12-14 Dec. Kashan, Iran, 2018.
- M. A. Iranmanesh and **M. Arezoomand**, *On the isomorphisms of bi-Cayley graphs*, Graphs, groups, and more: celebrating Brian Alspachs 80th and Dragan Marusic 65th birthdays, Koper, Slovenia, May 28-June 1, 2018.
- **M. Arezoomand**, *On the eigenvalues of quasi-abelian n-Cayley graphs*, Workshop on Graph Spectra, Combinatorics and Optimization, Aveiro, Portugal, 2018.

2017

- **M. Arezoomand** and A. R. Abdollahi, *Which group theoretic properties of a permutation group are inherited by its closures?*, 10th Iranian Group Theory Conference, Tehran, Iran, 2017.
- **M. Arezoomand** and A. R. Ashrafi, *On the spectrum of 2-type bi-circulants*, 10th Graph Theory and Algebraic Combinatorics Conference, Yazd, Iran, 2017
- **M. Arezoomand** and A. R. Abdollahi, *Totally 2-closed finite groups*, Caucasian Mathematics Conference II, Turkey, 2017

2013

- **M. Arezoomand** and B. Taeri, *Eigenvalues and eigenvectors of finite n-Cayley digraphs over arbitrary groups*, Ph.D summer school in Discrete Mathematics, Rogla, Slovenia, 2013.
- **M. Arezoomand** and B. Taeri, *Bipartite semi-Cayley graphs over finite simple non-abelian groups*, 6th Algebraic Combinatorics conference of Iran, University of Mazandaran, Babolsar, Iran, 2013.
- **M. Arezoomand** and B. Taeri, *On the semiregular actions and linear representation theory of finite groups*, 23th Iranian Algebra Seminar, Faculty of Computer and Mathematics, Khansar, Iran, 2013.

Awards and honours

- Top researcher of University of Larestan, 2017.
- Reviewer of American Mathematical Reviews, since March of 2014.
- Non-resident researcher of School of Mathematics, IPM (Institute for research in fundamental sciences), 2016-2017.



- Top thesis and top graduate among all 2015 graduates of Isfahan University of Technology.
- First grade Phd student among all 2010 Ph.D students of department of mathematical sciences of Isfahan University of technology.
- Best researcher among all of invited teachers of Majlesi branch of Islamic Azad University (2009).
- Selecting as Top 25 hottest articles of Journal of Geometry and Physic July to September 2009.
- Financial support of M. Sc. thesis by Iranian nanotechnology initiative council (2007).

Projects

- Symmetry Groups and structural properties of the graph of C_4C_8 (nanotubes and nanotori, Islamic Azad University, Majlesi branch, 2009-2010.
- Which π -nite groups are BCI -groups, School of Mathematics, IPM, since 2016.
- On the polycirculant conjecture, University of Isfahan, 2016-2017.

Invited Speaker of

The Third Conference on Computational Group Theory, Computational Number Theory and Applications, University of Kashan, 21–23 Azar 1397 (12–14 December 2018).

Referee for

- Turkish Journal of Mathematics
- Journal of Discrete Mathematics
- International Journal of Group Theory
- Discrete Mathematics, Algorithms and Applications
- Australasian Journal of Combinatorics
- Algebraic Structures and Their Applications
- AKCE International Journal of Graphs and Combinatorics
- Facta Universitatis, Series: Mathematics and Informatics.

References

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