

Reza Abazari

Curriculum Vitae

University of Mohaghegh Ardabili
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Positions

2020-Now **Assistant Professor**, Department of Mathematics, University of Mohaghegh Ardabili, Ardabil, Iran.

2017-2020 **Lecturer**, Department of Mathematics, University of Mohaghegh Ardabili, Ardabil, Iran.

Info

Birth & Place 1982, Ardabil, Iran

Homepage <https://academics.uma.ac.ir/profiles?Name=abazari-r>

Personal <https://github.com/abazari>

Google Scholar <https://scholar.google.com/citations?user=rqSaUX8AAAAJhl=en>

Scopus <https://www.scopus.com/authid/detail.uri?authorId=28767526200>

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Educations

PhD Applied Mathematics, University of Tabriz, Tabriz, Iran, 2017.

MSc Applied Mathematics, University of Mohaghegh Ardabili, Ardabil, Iran, 2008.

BSc Pure Mathematics, University of Payame Noor, Ardabil, Iran, 2005.

Research Interests

General Applied Mathematics,

Specific Computational Mathematics, Mathematical methods in medical sciences, Medical Image analyzing.

Experience

Teaching

2020-Now **Assistant Professor**, University of Mohaghegh Ardabili, Ardabil, Iran.

2017-2020 **Lecturer**, University of Mohaghegh Ardabili, Ardabil, Iran.

2015-2017 **Lecturer**, University of Payame Noor, Ardabil, Iran.

Researching

2018-Now **Senior Researcher**, University of Mohaghegh Ardabili, Ardabil, Iran.

2014-2018 **Researcher**, University of Tabriz, Tabriz, Iran.

2009-2014 **Researcher**, Young Researchers and Elite Club, Ardabil, Iran.

2008-2009 **Researcher**, University of Mohaghegh Ardabili, Ardabil, Iran.

Manuscripts in preparation

56. Alternative directional method for weighted sum of anisotropic and isotropic TV image reconstruction.
55. Intrinsically parallel difference method for the partial-integro differential equations with weakly singular kernel.
54. Optimal error estimates of finite difference methods for the 2D Kuramoto-Tsuzuki equation.
53. Directional total generalized variation (DTGV) and shearlet method for image reconstruction.
52. A high order kernel smoothing model with shearlet transform for Image restoration.
51. Three dimensional MRI reconstruction via weighted difference of isotropic-anisotropic TV method.

Journal Papers

50. Reza Abazari, Kenan Yildirim, Numerical study of the 2D Cahn-Hilliard model of phase separation with logarithmic potential function, (2023), accepted.
49. R. Abazari, H. Rezazadeh, L. Akinyemi, M. Inc, Numerical simulation of a binary alloy of 2D Cahn-Hilliard model for phase separation, *Comp. Appl. Math.* 41, 389 (2022). <https://doi.org/10.1007/s40314-022-02109-5>.
48. E.U Yilmaz, F.S Khodad, Y.S Ozkan, R. Abazari et. al, Manakov model of coupled NLS equation and its optical soliton solutions, *Journal of Ocean Engineering and Science*, (2022), <https://doi.org/10.1016/j.joes.2022.03.005>.
47. Hadi Rezazadeh, Meryem Odabasi, Kalim U.Tariq, Reza Abazari & Haci Mehmet Baskonus, On the conformable nonlinear schrödinger equation with second order spatiotemporal and group velocity dispersion coefficients, *Chinese Journal of Physics*, 72 (2021) 403–414.
46. Hadi Rezazadeh, Reza Abazari, Mibaile Justin, Ahmet Bekir & Alper Korkmaz, Bright and Singular Optical Solitons in Nonlinear Negative-Index Materials with Quadratic-Cubic Nonlinearity, *Arabian Journal for Science and Engineering* volume 46 (2021) 5977–5991.
45. Adil Jhangeer, Hadi Rezazadeh, Reza Abazari, Kenan Yildirim, Sumaira Sharif & Farheen braheem, Lie analysis, conserved quantities and solitonic structures of Calogero-Degasperis-Fokas equation, *Alexandria Engineering Journal*, 60 (2), (2021) 2513–2523.
44. Hadi Rezazadeh, Reza Abazari, Mostafa M. A. Khater, Mustafa Inc, and Dumitru Baleanu, New optical solitons of conformable resonant nonlinear Schrödinger's equation, *Open Physics*, 18 (2020) 761–769.
43. Reza Abazari, Kenan Yildirim, Quntic B-spline method for numerical solution of the Rosenau-Burgers equation, *Sigma*, 37 (3), (2019) 967–979.
42. Reza Abazari, Kenan Yildirim, Numerical study of Sivashinsky equation using a splitting scheme based on Crank-Nicolson method, *Math. Meth. Appl. Sci.*, 42(16), (2019) 5509-5521.
41. Reza Abazari, Mehrdad Lakestani, Non-sampled shearlet transform and log-transform methods for despeckling of medical ultrasound images, *Informatica*, 30(1) (2019) 1–19.
40. Reza Abazari, Shabnam Jamshidzadeh, Gangwei Wang, Mathematical modeling of DNA vibrational dynamic and its solitary wave solutions, *Rev. Mex. Fis.*, 64 (2018) 590–597.
39. Reza Abazari, Mehrdad Lakestani, A hybrid denoising algorithm based on shearlet transform method and Yaroslavskys filter, *Multimed. Tools. Appl.*, 77 (2018) 17829–17851.
38. Reza Abazari, Mehrdad Lakestani, Fourier based discrete shearlet transform for speckle noise reduction in medical ultrasound images, *Curr. Med. Imaging Rev.*, 14 (2018) 477–483.
37. Shabnam Jamshidzadeh, Reza Abazari, Solitary wave solutions of three special type of Boussinesq equations, *Nonlinear Dyn* 88 (2017), 2797–2805.
36. Reza Abazari, Shabnam Jamshidzadeh, Anjan Biswas, Solitary Wave Solutions of Coupled Boussinesq Equation, *Complexity*, 21 (2016) 151–155.
35. Gangwei Wang, Tianzhou Xu, Hassan A. Zedan, Reza Abazari, Houria Triki, Anjan Biswas, Solitary waves, Shock waves and other solutions to Nizhniki-Novikov-Veselov equation, *Appl. Comput. Math.*, 14(3) (2015) 260–283.
34. Malek Abazari, Mahdia Gholamnejad, Ghodrattollah Roshanaei, Reza Abazari, Yousef Roosta, Hossein Mahjub, Estimation of Survival Rates in Patients with Lung Cancer in West Azerbaijan, the Northwest of Iran, *Asian Pac. J. Cancer Prev: APJCP* 16 (9)(2015) 3923–3926.

33. Reza Abazari, Shabnam Jamshidzadeh, Exact solitary wave solutions of the complex Klein-Gordon equation, *Optik*, 126 (2015) 1970-1975.
32. Reza Abazari, Rasoul Abazari, Numerical solution of the Rosenau equation using quintic collocation B-spline method, *Iranian J. Sci. Technol. A.*, 39A3 (2015) 281–288.
31. Gang–Wei Wang, Tian–zhou Xu, Reza Abazari, Zlatko Jovanoski, Anjan Biswas, Shock waves and other solutions to the Benjamin–Bona–Mahoney–Burgers equation with dual-power law nonlinearity, *Acta Phys. Pol. A.*, 126, (2014) 1221–1225.
30. Reza Abazari, General solution of a special class of nonlinear BBM-B equation by using the (G'/G) -expansion method, *Rom. Rep. Phys.*, 66(2), (2014) 286–295.
29. Rafie Rafiezadeh, Reza Abazari, Weighted Fuzzy Transform and its application for approximation of Discrete Functions by Continuous Functions, *J. Intell. Fuzzy Syst.*, 26, (2014) 2437-2444.
28. Reza Abazari, Application of extended Tanh function method on KdV–Burgers equation with forcing term, *Rom. J. Phys.*, 56(1–2), (2014) 3–11.
27. Reza Abazari, A modified form of (G'/G) -expansion method and its application to Potential Kadomtsev–Petviashvili (PKP) equation, *Jpn. J. Ind. Appl. Math*, 31, (2014) 125-136.
26. Reza Abazari, Adem Kilicman, Application of differential transform method on nonlinear integro-differential equations with proportional delay, *Neural Comput. Appl.*, 24, (2014), 391-397.
25. Reza Abazari, Malek Abazari, Numerical study of Burgers-Huxley equations via reduced differential transform method, *Comp. Appl. Math.*, 32, (2013) 1–17.
24. Reza Abazari, Adem Kilicman, Numerical Study of Two–Dimensional Volterra Integral Equations by RDTM and Comparison with DTM, *Abstr. Appl. Anal.*, (2013), Article ID 929478, 10 pages, doi:10.1155/2013/929478.
23. Reza Abazari, Solitary wave solutions of Klein-Gordon equation with quintic nonlinearity, *J. Appl. Mech. Tech. Phys*, 54 (3), (2013) 397-403.
22. Reza Abazari, On the exact solitary wave solutions of a special class of Benjamin-Bona-Mahony equation, *Comput. Math. Math. Phys*, 53 (9), (2013) 1371-1376.
21. Reza Abazari, Adem Kilicman, Solitary wave solutions of the Boussinesq equation and its improved form, *Math. Prob. Eng*, Volume 2013, Article ID 468206, 8 pages <http://dx.doi.org/10.1155/2013/468206>.
20. Adem Kilicman, Reza Abazari, Travelling wave solutions of the Schrödinger–Boussinesq System, *Abstr. Appl. Anal.*, (2012), Article ID 198398, 11 pages, doi:10.1155/2012/198398.
19. Reza Abazari, Comment on "A new method for a generalized Hirota–Satsuma coupled KdV equation, [*Appl. Math. Comput.* 217 (17) (2011) 7117-7125]", *Appl. Math. Comput*, 218 (2012) 5838-5839.
18. Reza Abazari, Malek Abazari, Numerical simulation of generalized Hirota–Satsuma coupled KdV equation by RDTM and Comparison with DTM, *Commun. Nonlinear Sci. Numer. Simulat*, 17 (2012) 619–629.
17. Reza Abazari, Adem Kilicman, Solution of Second-Order IVP and BVP of Matrix Differential Models Using Matrix DTM, *Abstr. Appl. Anal.*, (2012), Article ID 738346, 11 pages, doi:10.1155/2012/738346.
16. Reza Abazari, The modified (G'/G) -expansion method for exact solutions of the $(3+1)$ -dimensional Jimbo–Miwa equation, *Cankaya Univ. J. Sci. Eng.*, 9(1) (2012), 59–67.
15. Adem Kilicman, Reza Abazari, Traveling wave solutions of the Schrödinger–Boussinesq system, *Math. Prob. Eng.*, (2012), Article ID 198398, 11 pages doi:10.1155/2012/198398.
14. M.M. Kabir, A. Borhanifar, Reza Abazari, Application of (G'/G) -expansion method to Regularized Long Wave (RLW) equation, *Comput. Math. Appl.*, 61 (2011) 2044-2047.
13. A. Borhanifar, Reza Abazari, Exact solutions for non-linear Schrödinger equations by differential transformation method, *J. Appl. Math. Comput.*, 35 (2011), 37–51.
12. Reza Abazari, The (G'/G) -expansion method for the coupled Boussinesq equations, *Procedia Eng.*, 10 (2011) 2845–2850.
11. Reza Abazari, Masoud Ganji, Extended two-dimensional DTM and its application on nonlinear PDEs with proportional delay, *Int. J. Comput. Math*, 88(8) (2011), 1749-1762.
10. Reza Abazari, Rasoul Abazari, Hyperbolic, Trigonometric and Rational function solutions of Hirota–Ramani equation via (G'/G) -expansion method, *Math. Prob. Eng*, (2011), Article ID 424801, 11 pages, doi:10.1155/2011/424801.

9. Reza Abazari, Numerical simulation of coupled nonlinear Schrödinger equation by RDTM and comparison with DTM, *J. Appl. Sci.*, 11(20)(2011) 3454–3463.
8. Reza Abazari, The solitary wave solutions of Zoomeron Equation, *Appl. Math. Sci.*, 5 (59) (2011) 2943–2949.
7. A. Borhanifar, Reza Abazari, Numerical study of nonlinear Schrödinger and coupled Schrödinger equations by differential transformation method, *Opt. Commun.*, 283 (2010) 2026–2031.
6. Reza Abazari, Application of (G'/G) -expansion method to travelling wave solutions of three nonlinear evolution equation, *Comput. Fluids*, 39 (2010), 1957–1963.
5. Reza Abazari, A. Borhanifar, Numerical study of the solution of the Burgers and coupled Burgers equations by differential transformation method, *Comput. Math. Appl.*, 59 (2010) 2711–2722.
4. Reza Abazari, The (G'/G) -expansion method for Tzitzeica type nonlinear evolution equations, *Math. Comput. Model.*, 52 (2010) 1834–1845.
3. A. Shabani Shahrabaki, Reza Abazari, Perturbation method for heat exchange between a gas and solid particles, *J. Appl. Mech. Tech. Phys.*, 50(6)(2009) 959–964.
2. A. Borhanifar, Reza Abazari, An unconditionally stable parallel difference scheme for Telegraph equation, *Math. Prob. Eng.*, (2009), Article ID 969610, 17 pages, doi:10.1155/2009/969610.
1. A. Borhanifar, Reza Abazari, Numerical Solution of Second-Order Matrix Differential Models Using Cubic Matrix Splines, *Appl. Math. Sci.*, 1 (59) (2007) 2927–2937.

Conference Publications

7. Reza Abazari, Regularization Methods for Discrete Ill-Posed Problems, 3th International Conference on Mathematics: An Istanbul Meeting for World Mathematicians, Istanbul, Turkey, 3-5 July 2019. [Invited speaker]
6. Reza Abazari, Inverse Problems in Image Processing, Annual meeting in "Research week", University of Tabriz, Tabriz, Iran, 21-29 November, 2017. [Talk]
5. Reza Abazari, Micro-Local Analysis and its Applications, Institute for Advanced Studies in Basic Sciences (IASBS), Zanjan, Iran, 23-25 April, 2017.
4. Reza Abazari, Wavelets with composite dilation, Annual meeting in "Research week", University of Tabriz, Tabriz, Iran, 21-29 November, 2016. [Talk]
3. Reza Abazari, The (G'/G) -expansion method for the coupled Boussinesq equations, International Conference on Mechanical Behavior of Materials, ICM 11, June 5-9, 2011, Milano, Italy.
2. Reza Abazari, A. Borhanifar, Numerical study of a nonlinear matrix evolution equation using matrix differential transformation method, 40-th Annual Iranian mathematics conference, 17-20 August 2009, Tehran, Iran.
1. Reza Abazari, Numerical solution of heat equation involving fixed Interfaces, 38th Annual Iranian Mathematics Conference, 3-6 September 2007, Zanjan, Iran.

Theses Supervised

- MSc Thesis**
- Elaheh Amanvand, *Speckle noise removal in ultrasound images by total variation method*, December 2023.
 - Leila Kazemi, *Numerical study of functional integro-differential equations having variable bounds*, October 2022.
 - Vahid Yarizadeh, *Numerical study of a partial integro-differential equation with a weakly singular kernel*, October 2020.

Skills

- Software Programming** Python, MATLAB, MAPLE and C++.
- Computer skills** L^AT_EX, Microsoft Word, Microsoft Excel, Microsoft Power Point.
- Languages** Turkish (mother tongue); Persian (national language); English (fluent); Arabic (intermediate).

Awards & Scholarships

- PhD Scholarship, "Ministry of Science Research and Technology", Iran, 2014-2017.
- Monthly Research Allowance, "National Foundation of Elites", Iran, May 2015-May 2016.
- Conference Travel Grant, "Young Researchers and Elite Club", Ardabil, Iran, 2011.

Memberships of professional & learned societies

- Special member of the Young Researchers and Elite Club, Ardabil Branch, Ardabil, IRAN, May 2009–Present.
- Member of the Iranian Mathematical Society, 2015–present.

Conference & Seminar Organization

- Member of Scientific Committee of the "International Online Conference on Differential Equations, Control and Optimization (DECOP'20)", Istanbul, Turkey, 09-11 September 2020.
- Member of Organizing Committee of the "3th International Conference on Mathematics: An Istanbul Meeting for World Mathematicians", Istanbul, Turkey, 3-5 July 2019.
- Member of Organizing Committee of the "Second International Conference on Mathematics: An Istanbul Meeting for World Mathematicians", Istanbul, Turkey, 3-6 July 2018.
- Member of Scientific Committee of the "International Conference on Pure and Applied Mathematics (ICPAM 2015)", Van, Turkey, 25-28 August 2015.

References

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