



Ali Eftekhari

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EDUCATION

Ph.D. Numerical Analysis, Kharazmi University, 2014

M.Sc. Numerical Analysis, K. N. Toosi University of Technology, 1999

B.Sc. Pure Mathematics, Kharazmi University, 1997

RESEARCH INTERESTS

- Numerical Analysis
- Sinc methods
- Numerical Linear Algebra
- Numerical methods for Differential and Integral equations
- Fractional and Stochastic Differential and Integral equations

PUBLICATIONS

Journal Papers

- A. Saadatmandi, M. Dehghan, [A. Eftekhari](#), Application of He's homotopy perturbation method for non-linear system of second-order boundary value problems, *Nonlinear Analysis: Real World Applications* 10 (3), (2009) 1912-1922.
- E. Babolian, [A. Eftekhari](#), A. Saadatmandi, A Sinc-Galerkin technique for the numerical solution of a class of singular boundary value problems, *Computational and Applied Mathematics* 34 (1), (2015) 45-63.
- E. Babolian, [A. Eftekhari](#), A. Saadatmandi, A sinc-Galerkin approximate solution of the reaction-diffusion process in an immobilized biocatalyst pellet, *MATCH Commun. Math. Comput. Chem* 71 (3), (2014) 681-697.
- A. Saadatmandi, A. Asadi, [A. Eftekhari](#), Collocation method using quintic B-spline and sinc functions for solving a model of squeezing flow between two infinite plates, *International Journal of Computer Mathematics* 93 (11), (2016) 1921-1936.
- A. Eftekhari, DOUBLE EXPONENTIAL EULER-SINC COLLOCATION METHOD FOR A TIME-FRACTIONAL CONVECTION-DIFFUSION EQUATION, *Facta Universitatis, Series: Mathematics and Informatics* 34 (4), (2019) 745-753.
- A. Saadatmandi, A. Ghasemi-Nasrabady, [A. Eftekhari](#), Numerical study of singular fractional Lane-Emden type equations arising in astrophysics, *Journal of Astrophysics and Astronomy* 40 (3), (2019) 27.

Conference Papers

- E. Babolian, [A. Eftekhari](#), A. Saadatmandi, A sinc-collocation method for solving a nonlinear system of second order boundary value problems, 44th Annual Iranian Mathematics Conference, Mashhad, Iran, 2013.
- [A. Eftekhari](#), A. Saadatmandi, Application of Double Exponential sinc-collocation method for solving multi-point boundary value problem for optimal bridge design, International Conference on Architecture and Mathematics, Kashan, Iran, 2017.
- [A. Eftekhari](#), A. Saadatmandi, DE sinc collocation method for solving the Bagley-Torvik equation with variable coefficients, 48th Annual Iranian Mathematics Conference, Hamedan, Iran, 2017.

- [A. Eftekhari](#), M. Dorpasand, DE Sinc-Legendre collocation method for time fractional partial differential, 47th Annual Iranian Mathematics Conference, Kharazmi University, Karaj, Iran, 2016.
- [A. Eftekhari](#), The double exponential Sinc collocation method for solving a model of squeezing flow problem, Second National Conference on Mathematics and its Applications, Malayer, Iran, 2015.

INVITED REVIEWER FOR JOURNALS

- Computational Methods for Differential Equations
- Iranian Journal of Mathematical Chemistry
- International Journal of Engineering Mathematics

GRADUATE AND UNDERGRADUATE COURSES

- Numerical Analysis I, II
- Numerical Computing
- Calculus I, II, III
- Ordinary Differential Equations
- Partial Differential Equations
- Special Functions
- Advanced Numerical analysis
- Numerical Methods in Linear Algebra

COMPUTER SKILLS

Computer Algebra Systems (Maple and Matlab)