



# Ali Forough Bastani

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## Publications

### Journals

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- Mighani, Abolfazl and Forough Bastani, Ali and Kazemi, Seyed-Mohammad-Mahdi, "On Multilevel RBF Collocation Based on Operator Newton Iteration to Solve Nonlinear Black--Scholes Equations", Iranian Journal of Science and Technology, Transactions A: Science, Vol. 46, NO. 2, 2022
- Abedini, Nazanin and Bastani, Ali Forough and Zangeneh, Bijan Zohouri, "A Petrov-Galerkin finite element method using polyfractonomials to solve stochastic fractional differential equations", Applied Numerical Mathematics, Vol. 169, NO. 2, 2021
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- Damircheli, Davood and Kazemi, Seyed-Mohammad-Mahdi and Bastani, Ali Forough, "On Numerical Solution of Structural



model for the Probability of Default under a Regime-Switching Synchronous-Jump Tempered Stable L $\backslash$ 'evy Model with Desingularized Meshfree Collocation method", arXiv preprint arXiv:2109.04676, Vol. 383, NO. 2, 2021

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- Nedaiasl, Khadijeh and Bastani, Ali Foroush and Rafiee, Aysan, "A Product Integration Method for the Approximation of the Early Exercise Boundary in the American Option Pricing Problem", Mathematical Methods in the Applied Sciences, Vol. 42, NO. 8, 2019



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- Ahmadi, Zahra and Hosseini, Seyyed Mohammad and Bastani, Ali Foroush, "A Lattice-Based Approach to Price Options Under Mean-Reverting Regime-Switching Diffusion Processes", Numerical Analysis and Its Applications, Vol. 80, NO. 3, 2018
- Abedini, Nazanin and Bastani, Ali Foroush and Zangeneh, Bijan Zohouri, "Finite Element Method for Fractional Stochastic Differential Equations", Numerical Analysis and Its Applications, Vol. 80, NO. 3, 2018
- Bastani, Ali Foroush and Dastgerdi, Maryam Vahid and Mighani, Abolfazl, "On multilevel RBF collocation to solve nonlinear PDEs arising from endogenous stochastic volatility models", Communications in Nonlinear Science and Numerical Simulation, Vol. 59, NO. 3, 2018
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