

Dr. Adeline Peter Mtunya is a Lecturer at the Mkwawa University College of Education. He is a mathematician whose research activities has been aiming at providing better solutions for the real world problems by the use of mathematical concepts and computational tools. His research interests include Financial mathematics, Stochastic modelling, Optimization and Computation. For previous three years, while undertaking his doctorate studies, He investigated on the optimal strategies the corporate firms can apply on the dividend payout, investment growth and debt issuance. Mtunya's research emphasis is on the formulation and analysis of useful mathematical models that help in making optimal decisions in financial management and policy making. He received a Ph. D in Applied Mathematics and Computational Science from the Nelson Mandela African Institution of Science and Technology (NM-AIST), Arusha. Before that, Mtunya graduated M. Sc in Mathematical modelling and B. Sc with Education from the University of Dar es Salaam. He has expertise in data analysis and computer programming using MATLAB, C++ and Java. He teaches undergraduate courses in Functional analysis, Abstract algebra, Computer programming and Discrete mathematics. Before joining the university teaching, Mtunya worked shortly as ICT teacher in a secondary school in Tanzania.

Contacts:

Email: tunyason@yahoo.co.uk / mtunya_ap@muce.ac.tz

Phone: +255 755 699 215 / +255 658 699 215

Areas of Specialization and Research interests

Financial mathematics, Stochastic modelling, Optimization and Computation

Selected publications

Mtunya, A. P., Ngare, P., & Nkansah-Gyekye, Y. (2016). On Steady Dividend Payment under Functional Mean Reversion Speed. *Journal of Mathematical Finance*, 6(03), 368.

Mtunya, A. P., Ngare, P., & Nkansah-Gyekye, Y. (2017). Optimal Investment Strategy under Stochastic Interest Rates. *Journal of Mathematical Finance*, 7(02), 319.

Mtunya, A. P., Ngare, P., & Nkansah-Gyekye, Y. (2017). Steady dividend payment and investment financing strategy: a functional mean reversion speed approach. *Journal of Mathematical and Computational Science*, 7(4), 677-698.

Mtunya, A. P., Ngare, P., & Nkansah-Gyekye, Y. (2018). Optimal Investment Strategy with Debt Financing under Stochastic Interest Rates. *Mathematical Finance Letters*, 2018(3)