Assoc. Prof. AZİZE HAYFAVİ

Personal Information

Office Phone: +90 312 210 5613
Email: azizeh@metu.edu.tr
Web: https://avesis.metu.edu.tr/azizeh

Research Areas

Mathematics, Multivariate Complex Functions and Analytic Spaces, Functions of a Complex Variable, Probability Theory, Stochastic Processes, Natural Sciences

Academic Titles / Tasks

Associate Professor, Middle East Technical University, Institute of Applied Mathematics, Financial Mathematics, 2002 - Continues

Assistant Professor, Middle East Technical University, Faculty of Arts and Sciences, Department of Mathematics, 1964 - 2003

Advising Theses

HAYFAVİ A., Modeling interest rates moving in a band, Doctorate, Ö.Özel(Student), 2018

HAYFAVİ A., Modeling temperature and pricing weather derivatives based on temperature, Doctorate, B.Taştan(Student), 2016

HAYFAVİ A., A Regime switching model for the temperature and pricing weather derivatives, Doctorate, A.Türkvatan(Student), 2016

HAYFAVİ A., Modeling correlation structure for collateralized debt obligations and determining the underlying credit default swap spread equations, Doctorate, D.İlalan(Student), 2015

HAYFAVİ A., Particle MCMC for a time changed Ĺevy process, Doctorate, A.Yüksel(Student), 2015

YOLCU OKUR Y., HAYFAVİ A., Backward stochastic differential equations and Feynman-Kac formula in the presence of jump processes, Post Graduate, C.İncegül(Student), 2013

YOLCU OKUR Y., HAYFAVİ A., Backward stochastic differential equations and their applications to stochastic control problems, Post Graduate, H.Sevda(Student), 2013

HAYFAVİ A., Stochastic modeling of electricity markets, Doctorate, İ.Talaslı(Student), 2012

HAYFAVİ A., Stochastic volatility and stochastic interest rate model with jump and its application on General Electric data, Post Graduate, B.Celep(Student), 2011

HAYFAVİ A., Continuous time mean variance optimal portfolios, Doctorate, Ö.Sezgin(Student), 2011

HAYFAVİ A., YOLCU OKUR Y., Option pricing with fractional brownian motion, Post Graduate, A.İnkaya(Student), 2011

HAYFAVİ A., EROL I., Completion, pricing and calibration in a Lévy market model, Post Graduate, B.Zeynep(Student), 2010

HAYFAVİ A., Pricing inflation indexed swaps using an extended hjm framework with jump process, Post Graduate, C.Karahan(Student), 2010

HAYFAVİ A., Dynamic complex hedging and portfolio optimization in additive markets, Post Graduate, O.Polat(Student), 2009

HAYFAVİ A., Pricing inflation-indexed swaps and swaptions using an hjm model, Post Graduate, Z.Canan(Student), 2009

HAYFAVİ A., A market model for pricing inflation indexed bonds with jumps incorporation, Post Graduate,
İ.Ethem(Student), 2008

HAYFAVİ A., Completion of a levy market model and portfolio optimization, Post Graduate, A.Türkvatan(Student), 2008

HAYFAVİ A., Asset pricing models : stochastic volatility and information-based approaches, Post Graduate,
N.Çalışkan(Student), 2007

HAYFAVİ A., Jump detection with power and bipower variation processes, Post Graduate, H.Özlem(Student), 2007

HAYFAVİ A., Valuation of life insurance contracts using stochastic mortality rate and risk process modeling, Post
Graduate, Ş.Çetinkaya(Student), 2007

HAYFAVİ A., Static hedging strategies for barrier options and their robustness to model risk, Post Graduate,
O.Kaya(Student), 2007

HAYFAVİ A., Stochastic volatility, a new approach for vasicek model with stochastic volatility, Post Graduate,
S.Zeytun(Student), 2005

Articles Published in Journals That Entered SCI, SSCI and AHCI Indexes

I. **A regime switching model for temperature modeling and applications to weather derivatives pricing**
Turkvatan A., HAYFAVİ A., Omay T.
MATHEMATICS AND FINANCIAL ECONOMICS, vol.14, no.1, pp.1-42, 2020 (Journal Indexed in SCI)

II. **Modeling Temperature and Pricing Weather Derivatives Based on Temperature**
Tastan B., HAYFAVİ A.
ADVANCES IN METEOROLOGY, 2017 (Journal Indexed in SCI)

III. **Stochastic multifactor modeling of spot electricity prices**
HAYFAVİ A., Talasli I.
JOURNAL OF COMPUTATIONAL AND APPLIED MATHEMATICS, vol.259, pp.434-442, 2014 (Journal Indexed in SCI)

IV. **PRICING AND COMPLETION IN A LEVY MARKET MODEL WITH TEUGEL MARTINGALES**
Okur Y. Y. , TEMOÇİN B. Z. , HAYFAVİ A.
HACETTEPE JOURNAL OF MATHEMATICS AND STATISTICS, vol.41, no.5, pp.767-783, 2012 (Journal Indexed in SCI)

Citations

Total Citations (WOS):13
h-index (WOS):2