(On-site) Venue: Center for Research and Community Services (CRCS) & Center for Advanced Sciences (CAS), Bandung Institute of Technology

#### PARALLEL SESSION

Venue: CAS building, 5th floor, ITB Ganesha Campus, Bandung

Online participants/presenters can access the conference through the Zoom link: https://bit.ly/ICOFM\_2023

#### Saturday, 16 September 2023

Room 1: Study Hall

Topic: Optimization

Moderator: Hendri Maulana, M.Si.P.

Time	Title	Presenter
15.20 – 15.40	Mathematic Model and Optimal Strategy of Hit Phenomena for Indonesia Cosmetic Brands	Sukma Eka Pratiwi
15.40 – 16.00	Dynamic Analysis and Control Strategies for Mathematical Model of Brand Competition	Sephia Yustika Wardhani
16.00 - 16.20	Controlling The Borrower Population of P2P Lending Models	Audri Utami Gunadi
16.20 - 16.40	Controlling the Influence of E-Commerce Brand Ambassador on Consumer Buying Interest	Saufi Chairunnisa
16.40 - 17.00	Robust Duality for Multi-dimensional Vector Variational Problem under Invexity assumptions	Ritu Bagri

Room 2: Seminar 5.1

Topic: Financial Mathematics

Moderator: Laila Maya Santi, M.Si.

Time	Title	Presenter







(+62) 811 1213 4333 &

### **ICOFM 2023**

International Conference On Optimization And Financial Mathematics Held Hybrid, September, 16 - 17 2023

(On-site) Venue: Center for Research and Community Services (CRCS) & Center for Advanced Sciences (CAS), Bandung Institute of Technology

15.20 – 15.40	Construction of The Bino-Trinomial Method Using The Fuzzy Set Approach to Option Pricing	Fitriani Agustina
15.40 – 16.00	Dynamics Model of Two-Banks with Deposit and Loan Interaction Between Banks and Stability Analysis	Laila Maya Santi and Andi Rafiqa Faradiyah
16.00 - 16.20	The Changing Landscape of the Malaysian Healthcare Sector during COVID-19: A Network Perspective	Hafizah Bahaludin
16.20 - 16.40	Profit-Sharing Schemes in Financing and Islamic Housing Mortgage	Wulan Nurul Kamilah

Room 3: Seminar 5.2

Topic: Financial Mathematics

Moderator: Wendy Wijaya, M.Si.

Time	Title	Presenter
15.20 – 15.40	Stock and Structured Warrant Portfolio Optimization Using Black-Litterman Model and Binomial Method	Cornelius Francis Jayadi
15.40 – 16.00	Airfare Price Prediction Using Long Short- Term Memory (LSTM)	Femilia Sinaga
16.00 - 16.20	A Grey Wolf Optimizer Method for Optimizing Cash Flows during COVID-19 Pandemic	Endah RM Putri
16.20 - 16.40	The Bino-Trinomial Tree Model for Determining Barrier Option Price	Rima Aulia Rahayu

Room 4: Seminar 5.3

Topic: Financial Mathematics

Moderator: Rini Andaria, M.Si., FSAI

Time	Title	Presenter





## **ICOFM 2023**

International Conference On Optimization And Financial Mathematics

Held **Hybrid**, **September**, 16 - 17 2023 (On-site) Venue: Center for Research and Community Services (CRCS) & Center for Advanced Sciences (CAS), Bandung Institute of Technology

15.20 – 15.40	Loan Benchmark Interest Rate in Banking Duopoly with Heterogeneous Expectation	Moch. Fandi Ansori
15.40 – 16.00	Analysis of Implied Volatility: Empirical Evidence from the FTSE Bursa Malaysia Kuala Lumpur Composite Index Options (OKLI)	Mimi Hafizah Abdullah
16.00 - 16.20	Numerical Solution of European Put Option for Black-Scholes Model Using Keller Box Method	Lutfi Mardianto
16.20 - 16.40	Solving Vanilla Options Pricing as Bi-objective Optimization Problems using Modification of Differential Evolution Algorithm	Werry Febrianti (online)

Room 5: Seminar 5.4

Topic: Actuarial Sciences

Moderator: Anggun Citra Delima, M.Si.

Time	Title	Presenter
15.20 – 15.40	Prediction Model Of Reserve On Pension Fund For Civil Servants Of University Academic Employees In Indonesia Using Accrued Benefit Cost And Entry Age Normal Methods	Annisa Rahmienda Maha and Hasna Khalishfi Yasyfa
15.40 – 16.00	Univariate Credibility as A Boundary-Value Problem, A Symbolic Green's Function Method	Agah D. Garnadi
16.00 - 16.20	Valuation of The Portfolio for Unit-Linked Insurance Under D-CPPI Strategy	Andi Fitriawati (online)
16.20 - 16.40	Risk Management for Big and Small Takāful Organizations	Lukman Hanif Arbi (online)







International Conference On Optimization And Financial Mathematics Held Hybrid, September, 16 - 17 2023

(On-site) Venue: Center for Research and Community Services (CRCS) & Center for Advanced Sciences (CAS), Bandung Institute of Technology

#### Sunday, 17 September 2023

Room 1: Study Hall Topic: Optimization

Moderator: Hendri Maulana, M.Si.P.

Time	Title	Presenter
13.15 - 13.35	Exact Distribution for the Quotient of Two Correlated Gaussian Random Variables	Rifyan Nasution
13.35 - 13.55	Optimization Of The Allocation Of Promotional Cost Using A Modified Markowitz Model	Yuni Wulandari and Novi Sagita Triyanti (online)
13.55 - 14.15	Portfolio Selection Using Hybrid Ant Colony Optimization and Compromise Programming	Dinita Rahmalia (online)
14.15 - 14.35	A Stochastic Programming Model for Solving Inventory Problem	Ramya Rachmawati (online)
14.35 - 14.55	Stability Analysis And Optimal Control Of Rumor Spreading Model With Time Delay	Setiawan Ahmad (online)

Room 2: Seminar 5.1

Topic: Optimization

Moderator: Rini Andaria, M.Si., FSAI

Time	Title	Presenter
13.15 - 13.35	Flight Scheduling Optimization for Airfreight Services with A Stochastic Simulation of Cargo Demand and Distribution	Azeilla Raihan Putri Nurmawan and Hani Tustanto
13.35 - 13.55	Optimization on Multiple Task Vehicle Routing Problems using Crow Search Algorithm with Transfer Learning Approach	Claryta Putri Dedyana Wati and Alfonsus Erhan Cahyana





# **ICOFM 2023**

International Conference On Optimization And Financial Mathematics Held Hybrid, September, 16 - 17 2023

(On-site) Venue: Center for Research and Community Services (CRCS) & Center for Advanced Sciences (CAS), Bandung Institute of Technology

13.55 - 14.15	Solving Multi-Objectives Vehicle Routing Problem Using Chaotic Grey Wolf Optimizer	Randy Ansari Nur Hidayat
14.15 - 14.35	Path Routing Optimization in Contact Graph Routing For Delivering Data in DTN Network	Basuki Suhardiman
14.35 - 14.55	Finding an Optimal Location for the Public Health Service Ambulance in Rengasdengklok	Jamaliatul Badriyah (online)

Room 3: Seminar 5.2

Topic: Financial Mathematics Moderator: Wendy Wijaya, M.Si.

Time	Title	Presenter
13.15 - 13.35	Sukuk versus Bond: Mathematically Literature Study	Wahyuning Murniati
13.35 - 13.55	Risk Quantification Using Generalized Quantiles with Higher-Order Moments	Arief Hakim
13.55 - 14.15	Matrix Representation of Quantized Martingale Measures: Triangular Distribution Case	Daryl Allen B. Saddi
14.15 - 14.35	Hidden Markov Representation of Microcredit	Jasmin-Mae S. Luy
14.35 - 14.55	A Comparison of Symmetric and Asymmetric Volatility Models: Empirical Properties and Volatility Forecasts	Nurhayati

Room 4: Seminar 5.3

Topic: Financial Mathematics Moderator: Laila Maya Santi, M.Si.

Time	Title	Presenter
13.15 - 13.35	Guaranteed Annuity Option under Correlated and Regime-Switching Risks: Parameter Estimation, Valuation, and Sensitivity Analysis	Jude Martin B. Grozen







### **ICOFM 2023**

International Conference On Optimization And Financial Mathematics Held **Hybrid**, **September**, 16 - 17 2023 (On-site) Venue: Center for Research and Community Services (CRCS) & Center for Advanced Sciences (CAS), Bandung Institute of Technology

13.35 - 13.55	Portfolio Optimization of LQ45 Stocks with Harris Hawks Optimization (HHO) Algorithm	Hansel Setiadi (online)
13.55 - 14.15	Predicting Stock Prices with Sentimen Analysis Using Machine Learning	Montana Gurning (online)
14.15 - 14.35	The Distortion Risk Based on Conditional Value-at-Risk	Aniq Rohmawati

Room 5: Seminar 5.4

Topic: Actuarial Sciences

Moderator: Anggun Citra Delima, M.Si.

Time	Title	Presenter
13.15 - 13.35	Premiums of Deposit Insurance With Maximum Limit Under Black-Scholes Model	Anggun Citra Delima
13.35 - 13.55	The Joint-Life Insurance Premium Model Using Archimedean Copula	Ahmad Fuad Zainuddin
13.55 - 14.15	An Optimal Combination of Proportional and Stop-loss Reinsurance with Dependent Risks from Insurer's Viewpoint	Suci Sari
14.15 - 14.35	Actuarial Modeling of Credit Insurance Using Multiple Decrement Model with Stochastic Return on Investment (ROI)	Annisaa' Rahmaah Nurul Syawal (Online)



