

DAY 1 • 8 DEC 2020 (Malaysia Time or GMT+8)

Time	Room A <i>Chairperson: Prof. Dr. Hailiza Kamarulhaili</i>
09:00 – 10:00	PLENARY SESSION 1 Prof. Dr. Edy Tri Baskoro <i>Recent Progress on the Partition Dimension of Graphs</i>
Time	Room A <i>Chairperson: Assoc. Prof. Dr. Noor Atinah Ahmad</i>
10:00 – 10:40	INVITED SESSION 1 Assoc. Prof. Dr. Nguyen Ngoc Doanh <i>A Hybrid Modeling Approach for Sustainability Science</i>
Time	Room A <i>Chairperson: Assoc. Prof. Dr. Mohd Tahir Ismail</i>
14:00 – 14:40	INVITED SESSION 2 Prof. Dr. Ibrahim Mohamed <i>Statistics in Crescent Moon Sighting</i>

Time	Session 1A Room A Chairperson: TBA	Session 1B Room B Chairperson: TBA	Session 1C Room C Chairperson: TBA	Session 1D Room D Chairperson: TBA	Room E
11:00 – 11:20	AM02-Paper ID: 0029 Abhineshwary Bhalraj <i>Analytical and Numerical Solutions of Leptospirosis Model</i>	PM12-Paper ID: 0126 Zulfaneti <i>On Trees on n Vertices with Metric-Location-Domination Number $\frac{1}{2}n$</i>	MS01-Paper ID: 0125 N. S. Nordin <i>Analytical Network Process Based Representation Operations on Triangular Fuzzy Numbers for Supplier Selection Decision</i>	MT01-Paper ID: 0059 Mu'azah Md. Aziz <i>BasiCal Mobile Application Development Using Multimedia Element's Adoption on Basic Calculus Teaching and Learning</i>	
11:20 – 11:40	AM03-Paper ID: 0033 Tayyaba Akram <i>Numerical Solution of the Time Fractional Black-Scholes Equation Using B-spline Technique</i>	PM15-Paper ID: 0157 Muhammad Ridwan <i>On Graphs of Order n with Dominating Partition Dimension $n - 3$</i>	MS02-Paper ID: 0149 Helena Margaretha <i>A Dynamical Model of Dengue Primary and Secondary Infections with an Application to Microinsurance</i>	OR04-Paper ID: 0186 Mukhtar Eri Suheri <i>Effective Route Analysis for Petrol Tanker and Optimization Using Dijkstra Algorithm and Arena Simulation at Petrol Station XYZ</i>	WORKSHOP 1 <i>The Basic on Being Gig Edutuber</i> Dr. Nik Hadiyan Nik Azman and Dr. Ema Izati Zull Kepili
11:40 – 12:00	AM06-Paper ID: 0038 Asma Izzati Asnor <i>Numerical Solution of Fourth-Order Stiff Ordinary Differential Equations by Implicit High Order Block Backward Differentiation Formula</i>	PM11-Paper ID: 0124 Rikayanti <i>Algorithm for Computing the Total Vertex Irregularity Strength of Some Cubic Graphs</i>	FM02-Paper ID: 0037 Wulan Nurul Kamilah <i>Literature Study on Sharia Mathematical Finance</i>	OR01-Paper ID: 0025 Sharifah Aishah Syed Ali <i>Optimisation of Traffic Signal Plan for Isolated Intersection Using Genetic Algorithm</i>	

<p>12:00 – 12:20</p>	<p>AM08-Paper ID: 0042 Nur Tasnem Jaaffar <i>Solving Numerically the Singularly Perturbation Problems of Delay Differential Equations</i></p>	<p>PM02-Paper ID: 0030 Mohd Ali Khameini Ahmad <i>Note on Quartic Equations over p-Adic Field \mathbb{Q}_p</i></p>	<p>FM03-Paper ID: 0047 Moch Fandi Ansori <i>Dynamics of Bank's Balance Sheet: A System of Deterministic and Stochastic Differential Equations Approach</i></p>	<p>OR02-Paper ID: 0108 Chow Chia Khang <i>Optimisation of Traffic Signal Plan for Isolated Intersection using Genetic Algorithm</i></p>
<p>12:20 – 12:40</p>	<p>AM20-Paper ID: 0106 Amirah Azmi <i>Numerical Solution of Linear One Dimensional Fisher's Reaction Diffusion Equations by Finite Difference Methods</i></p>	<p>PM09-Paper ID: 0114 Andy Chuin Liang Kang <i>Complete Identification of Generators and Check Elements of Zero Divisor Codes over Cyclic Group Rings</i></p>	<p>FM04-Paper ID: 0057 Prasetyo Utomo <i>Capitalized the Application of Simulated Annealing Method in Optimizing Profit-Loss Sharing Ratio with Vasicek Model</i></p>	<p>OR03-Paper ID: 0109 Suat Ching Lau <i>Solving the Elevator Dispatching Problem Using Genetic Algorithm</i></p>
<p>12:40 – 13:00</p>	<p>AM28-Paper ID: 0137 Renier Mendoza <i>Numerical Resolution of the Electrical Impedance Tomography Inverse Problem with Fixed Inclusions</i></p>	<p>PM03-Paper ID: 0039 Intan Muchtadi-Alamsyah <i>The Relation between τ_n-Tilting Modules and n-term Silting Complexes</i></p>		<p>MT02-Paper ID: 0150 Helena Margaretha <i>Solving Sparse Reward Games Using Deep Q-Learning with Demonstration and Partial Training</i></p>

Time	Session 2A Room A Chairperson: TBA	Session 2B Room B Chairperson: TBA	Session 2C Room C Chairperson: TBA	Session 2D Room D Chairperson: TBA	Room E
15:00 – 15:20	AM38-Paper ID: 0184 Faridah Yonus <i>Power of Frobenius Endomorphism</i>	ST13-Paper ID: 0130 Joseph Ludwin DC. Marigmen <i>Analysis of Dengue Incidence in Baguio, Philippines</i>	AM19-Paper ID: 0099 H. Y. Alfifi <i>The Stability and Hopf Bifurcation Analysis for the Delay Diffusive Neural Networks Model</i>	ME01-Paper ID: 0032 Ainul Maulid bin Ahmad <i>The Effectiveness of Multimedia Elements Integrated Into Calculus Learning Using BasicCal Mobile Application</i>	<p>WORKSHOP 2 <i>Unboxing Topological Data Analysis</i></p> <p>Assoc. Prof. Dr. R. U. Gobithaasan</p>
15:20 – 15:40	AM29-Paper ID: 0138 Ali H. M. Murid <i>Methods and Comparisons for Computing the Zeros of the Ahlfors Map for Doubly Connected Regions</i>	ST08-Paper ID: 0096 Nurul Syafiqah Abd Naeem <i>Spatio-Temporal Regression Analysis of Dengue Cases with Climate Variables in Pulau Pinang</i>	AM22-Paper ID: 0112 Mohd. Asyraf Mansor <i>Optimal Performance Evaluation Metrics for Satisfiability Logic Representation in Discrete Hopfield Neural Network</i>	ME02-Paper ID: 0065 Nurul Aini Arnis Sutan Sati <i>Learning and Facilitating the Form 6 Topic of Limits and Continuity with the Graphing Calculator</i>	
15:40 – 16:00	AM09-Paper ID: 0044 Petarpa Boonserm <i>Quasinormal Modes of Perfect Spheres</i>	ST14-Paper ID: 0131 Joseph Ludwin DC. Marigmen <i>Analysis on the Onset of Dengue Outbreaks in Baguio City</i>	AM07-Paper ID: 0040 Werry Febrianti <i>Solving Systems of Ordinary Differential Equations Using Differential Evolution Algorithm with the Best Vector of Mutation Scheme</i>	ME03-Paper ID: 0083 Norfaizah Paisan <i>Students' Performance and Perception in Solving Sentence-form Mathematical Problems Through Multimedia Usage in Google Classroom</i>	

<p>16:00 – 16:20</p>	<p>AM10-Paper ID: 0052 Kunlapat Sansook <i>Greybody Factors for Various Black Holes in Perfect Fluid Spheres</i></p>	<p>ST20-Paper ID: 0160 Rizavel C. Addawel <i>Exploratory Data Analysis of COVID-19 Cases in Baguio City, Philippines</i></p>	<p>AM13-Paper ID: 0056 Renier Mendoza <i>Application of Genetic Algorithm with Multi-Parent Crossover On An Inverse Problem in Delay Differential Equations</i></p>	<p>ME04-Paper ID: 0122 Nancy Velasco <i>Linear Algebra and Robotics in the Teaching Process</i></p>
<p>16:20 – 16:40</p>	<p>AM11-Paper ID: 0054 Nor Ain Azeany Mohd Nasir <i>The Effects of Slip and Radiation on Stagnation Point Flow and Heat Transfer Past An Exponentially Stretching/Shrinking Riga Plate</i></p>	<p>ST23-Paper ID: 0177 Jhunas Paul T. Viernes <i>Contract Tracking and Expanded Testing of COVID-19 Cases in Baguio City, Philippines</i></p>	<p>AM17-Paper ID: 0095 Xu Ming Ming <i>Refinement of SOR Method For the Rational Finite Difference Solution of First-Order Fredholm Integro-Differential Equations</i></p>	<p>ME05-Paper ID: 0143 Christiyanti Aprinastuti <i>Classroom Based on Ignatian Pedagogy in Geometry Subject for Elementary School Pre-Service Teachers at Sanata Dharma University</i></p>
<p>16:40 – 17:00</p>	<p>AM14-Paper ID: 0074 Lok Yian Yian <i>Bödewadt Flow and Heat Transfer in Nanofluid Over A Stagnant Disk with Suction</i></p>		<p>AM24-Paper ID: 0121 Saranya Gunasingam <i>Order Seven Block Integrator Method For the Solution of First Order Ordinary Differential Equation</i></p>	<p>ME06-Paper ID: 0174 Jeyaletchumi Muthiah <i>Inculcating Creativity with Graphing Calculator</i></p>

DAY 2 • 9 DEC 2020 (Malaysia Time or GMT+8)

Time	Room A
08:40 – 09:40	Statworks Sharing Session Puteri Anis Aneeza Binti Zakaria <i>Technology Update: TI-Nspire CX Ecosystem</i>
Time	Room A
	<i>Chairperson: Prof. Dr. Munirah Ghazali</i>
09:40 – 10:40	PLENARY SESSION 2 Assoc. Prof. Dr. Leong Kwan Eu <i>Developing Mathematical Reasoning and Problem Solving Abilities Using Technology</i>
Time	Room A
	<i>Chairperson: Assoc. Prof. Dr. Farah Aini Binti Abdullah</i>
14:00 – 14:40	INVITED SESSION 3 Assoc. Prof. Dr. Teh Su Yean <i>Mathematical Modelling for Environmental Sustainability</i>

Time	Session 3A Room A Chairperson: TBA	Session 3B Room B Chairperson: TBA		Session 3D Room D Chairperson: TBA	Room E
11:00 – 11:20	AM01-Paper ID: 0027 Hafed. H. Salleh <i>Fuzzy Linear HIV Infection Model Solution and Analysis by Homotopy Perturbation Method</i>	ST22-Paper ID: 0164 Jamiah Ameer Ali <i>Investigating the Influence of Economic Variables and Socio-Economic Indicators on Carbon Emission in Asian and Asia-Pacific Countries</i>		FM01-Paper ID: 0024 MD. Jamal Hossain <i>Study of Bitcoin Volatility Dynamics: MSGARCH Model Approach</i>	<p>WORKSHOP 3 <i>Meaningful Mathematics Teaching and Learning Pedagogy, A Sustainable Method to Empower High Order Thinking Skills (HOTS) and Metacognition of Students</i></p> <p>Assoc. Prof. Dr. Ang Miin Huey</p>
11:20 – 11:40	AM32-Paper ID: 0147 Wan Munirah Wan Mohamad <i>Intelligent Fuzzy Logic Controller for Painting System of Vessel</i>	ST01-Paper ID: 0026 Sarah Mohd Khaidi <i>New Tourism Product Forecasting – A Study of Different Potential Markets</i>		FM07-Paper ID: 0088 Wajeih Mustafa Sarsour <i>Investment Valuation and the Performance of Companies with Modified Interval Rate of Return: A Simulation Markov Chain</i>	
11:40 – 12:00	AM12-Paper ID: 0055 Aisha Aliya Yakubu <i>Global Stability Analysis of Pertussis Transmission Dynamics with Maternally Derived Immunity Compartment</i>	ST24-Paper ID: 0182 Zainudin Arsad <i>Day-of-the-Week and Turn-of-the-Month Effects on Stock Market in Malaysia</i>		FM05-Paper ID: 0068 Novriana Sumarti <i>Implementation of Real Options with Learning Process on Bitcoin Mining Project</i>	

Tables of Presentations (v2)

<p>12:00 – 12:20</p>	<p>AM27-Paper ID: 0136 Elvira de Lara-Tuprio <i>Mathematical Analysis of a COVID-19 Compartmental Model with Interventions</i></p>	<p>ST25-Paper ID: 0183 Zainudin Arsad <i>The Impact of Stock Market Integration on Economic Growth in Asia and Europe Regions</i></p>		<p>FM09-Paper ID: 0158 Hishamuddin Abdul Wahab <i>The Wavelet-Based Exchanged Rate Exposure and Hedging Practices: An Application on Food and Beverage Firms in Malaysia</i></p>
<p>12:20 – 12:40</p>	<p>AM39-Paper ID: 0189 Noorehan Yaacob <i>Mathematical Modeling of Quasi-Static Signal and Ligand during Invadopodia Formation with Velocity Jump</i></p>	<p>ST28-Paper ID: 0188 Zainudin Arsad <i>Estimating Dynamic Relationship Between Stock Price and Macroeconomic Variables Using Kalman Filter Approach</i></p>		<p>FM06-Paper ID: 0076 Beidi Peng <i>Optimal portfolio choices under the SVCEV Model with exponential utility</i></p>
<p>12:40 – 13:00</p>	<p>AM42-Paper ID: 0104 Aisha Aliya Yakubu <i>Analysis and Numerical Solution of Fractional Order Control of COVID-19 Using Laplace Adomian Decomposition Method</i></p>	<p>ST06-Paper ID: 0064 Mohammad Raquibul Hossain <i>Empirical Mode Decomposition Based Double Exponential Smoothing Method for Daily Stock Price Forecasting</i></p>		<p>FM08-Paper ID: 0103 Kuan Kee Seng <i>Universal Portfolios Generated by the Reverse f and Bregman Divergences</i></p>

Time	Session 4A Room A Chairperson: TBA	Session 4B Room B Chairperson: TBA		Room D	Room E
15:00 – 15:20	AM04-Paper ID: 0035 Shehab Abdulhabib Alzaeemi <i>The Impact of MCO (Movement Control Order) Towards Air Quality in Selected Cities in Malaysia</i>	ST09-Paper ID: 0102 Adamu Abubakar Umar <i>Transmuted New Weighted Weibull Distribution: Some Statistical Properties and Application to Survival Time Data</i>			
15:20 – 15:40	AM16-Paper ID: 0091 Xin Yi Kh'ng <i>Modeling Sea Level Rise Impact on Coot Bay Hammock, Florida Everglades</i>	ST19-Paper ID: 0153 Khuneswari Gopla Pillay <i>Comparison Between Best Subset and Lasso Regression on Consumer Price Index Malaysia</i>		WORKSHOP 4 <i>Tools and Tricks of The Trade For Teaching</i> Prof. Dr. Abd Karim Alias	WORKSHOP 5 <i>COMOKIT – A Modeling Kit to Understand, Analyze and Compare the impacts of mitigation policies against the COVID-19 pandemic at the City</i> Assoc. Prof. Dr. Benoit Gaudau
15:40 – 16:00	AM23-Paper ID: 0115 Lucky Cahya Wanditra <i>Forecasting Total Suspended Solid Using Wavelet ARIMA Model</i>	ST16-Paper ID: 0144 Nur Athirah Mohamad Salleh <i>Application of Second Order Markov Chain on Daily Average Wind Speed wind in Malaysia</i>			

Tables of Presentations (v2)

<p>16:00 – 16:20</p>	<p>AM25-Paper ID: 0123 Raynaldi Lalang <i>Optimal Sinusoidal Submerged Breakwater for Coastal Protection</i></p>	<p>ST10-Paper ID: 0105 Adamu Abubakar Umar <i>Performance of Variable Sampling Interval EWMA Chart with Auxiliary Information for the Process Mean Based on Expected Average Time to Signal</i></p>	
<p>16:20 – 16:40</p>	<p>AM26-Paper ID: 0127 Izmi Sukma Rianti <i>A Simple Mathematical Model Simulating Individual Weight Based on Daily Diet Menu</i></p>	<p>ST26-Paper ID: 0199 Mukhtar Eri Suhaeri <i>Evaluation of Clustering Approach with Euclidean and Manhattan Distance for Outlier Detection</i></p>	
<p>16:40 – 17:00</p>	<p>AM33-Paper ID: 0148 Murtala Bello Aliyu <i>Effects of Competitor Species Growth Rate on Species Biodiversity</i></p>	<p>ST15-Paper ID: 0135 Saidat Fehintola Olaniran <i>Purchasing Power Parity: The West African Experience</i></p>	

DAY 3 • 10 DEC 2020 (Malaysia Time or GMT+8)

Time	<p style="text-align: center;"><i>Room A</i> <i>Chairperson: Assoc. Prof. Dr. Saratha Sathasivam</i></p>
09:00 – 09:40	<p style="text-align: center;">INVITED SESSION 4 Dr. Khayriyah Mohd Hanafiah <i>Using Mathematics to inform Public Health Precautions for Controlling Covid-19</i></p>
Time	<p style="text-align: center;"><i>Room A</i> <i>Chairperson: Prof. Dr. Ahmad Izani Md Ismail</i></p>
09:40 – 10:40	<p style="text-align: center;">PLENARY SESSION 3 Prof. Dr. Zinaida Fadeeva <i>Sustainable Development and Mathematics</i></p>

Time	Session 5A Room A Chairperson: TBA	Session 5B Room B Chairperson: TBA		Session 5D Room D Chairperson: TBA	Room E
11:00 – 11:20	AM18-Paper ID: 0097 Mohd Norfadli Suardi <i>Redlich-Kister Finite Difference Solution for Two-Point Boundary Value Problem by Using MKSOR Iteration</i>	ST11-Paper ID: 0113 Jayanthi Arasan <i>Jackknife and Bootstrap Estimates for Modified Residuals of the Log-Logistic Model</i>		PM14-Paper ID: 0156 John Rafael M. Antalan <i>Computation of some Distance-based Topological Indices for Multiplicative Circulant Networks of Order 3^h</i>	
11:20 – 11:40	AM34-Paper ID: 0154 Nur Farah Azira Zainal <i>Solving Nonlinear Burgers' Equation with Semi-Approximate Approach Using Modified Gauss-Seidel Iteration</i>	ST07-Paper ID: 0084 Siti Zulaikha Mohd Jamaludin <i>Modelling Binary Logistic Regression for Low Birth Weight in Segamat, Johor Malaysia</i>		PM10-Paper ID: 0117 Amer Mohammed <i>Geometric of Numerical and Quadratic Numerical Range for Block Operator Matrices</i>	WORKSHOP 6 <i>How to Gamify Your Math Classroom</i> Dr. Ahmad Lutfi Amri Ramli and Dr. Yazariah Mohd Yatim
11:40 – 12:00	AM37-Paper ID: 0173 Muhammad Asim Khan <i>Compact High-Order Implicit Iterative Scheme for the Two-Dimensional Time-Fractional Diffusion Equation</i>	ST18-Paper ID: 0152 Zahroh bt Shaik Abdullah <i>Application of Logit-Loglinear Model for TB Disease</i>		PM06-Paper ID: 0082 Ftameh Khaled <i>Quadratic Stochastic Operators Generated by Mixture Distributions</i>	

<p>12:00 – 12:20</p>	<p>AM41-Paper ID: 0191 Chuei Yee Chen <i>Scaled Parallel Iterative Method for Finding Real Roots of Nonlinear Equations</i></p>	<p>ST21-Paper ID: 0161 S. A. Halim <i>Statistical Modelling of Annual Retail Sales of Good and Services in The United States Using Generalized Pareto Distribution Model</i></p>		<p>PM08-Paper ID: 0101 Ali Turab <i>Some Particular Aspects of Certain Type of Probabilistic Predator-Prey Model with Experimenter-Subject-Controlled Events and the Fixed Point Method</i></p>
<p>12:20 – 12:40</p>	<p>AM05-Paper ID: 0036 Altaf Abdulkarem Al-Shawba <i>New Generalized (G' / G)-Expansion Method for Solving $(3 + 1)$-Dimensional Conformable Time Fractional KdV-ZK Equation</i></p>	<p>ST27-Paper ID: 0140 Oyebayo Ridwan Olaniran <i>Shrinkage Based Variable Selection Techniques for the Sparse Gaussian Regression Model: A Monte-Carlo Comparative Study</i></p>		<p>PM04-Paper ID: 0045 Muhammad Afifurrahman <i>On The Number of Different Entries in Involutory MDS Matrices over Finite Fields of Characteristic Two</i></p>
<p>12:40 – 13:00</p>	<p>AM40-Paper ID: 0190 N. S. Mohamad <i>Quadrature-Piecewise Collocation Solutions to the Fredholm Integral Equation of II kind Using ESOR Iteration</i></p>	<p>ST17-Paper ID: 0146 Sayed Kushairi Bin Sayed Nordin <i>Testing the Validity of the Energy-Environmental Kuznets Curve (EEKC) Hypothesis in Oil-Importing versus Oil-Exporting Countries: A Heterogeneous Panel Data Modeling Analysis</i></p>		

Time	Session 6A Room A Chairperson: TBA	Session 6B Room B Chairperson: TBA		Session 6D Room D Chairperson: TBA	Room E
14:00 – 14:20	AM15-Paper ID: 0090 Chai Jian Tay <i>Pharmacoeconomic Model of Dengue Vaccine for Malaysia: Assessing a Highly Cost-effective and Affordable Vaccine Price Threshold</i>	ST02-Paper ID: 0031 Pei Ling Kiew <i>Testing the Validity of Fisher Hypothesis: The Case of ASEAN-5</i>		PM07-Paper ID: 0094 Yao Liang Chung <i>Radius Problems for Some Subclasses of Analytic Functions</i>	
14:20 – 14:40	AM31-Paper ID: 0142 Juancho A. Collera <i>Dynamics of an IS-LM Macroeconomic Model with Delay-Dependent Coefficients</i>	ST03-Paper ID: 0043 Shantini Sekaran <i>Examining the Nonlinearity Effects of Oil Price Changes of Commodity Prices</i>		PM05-Paper ID: 0070 Musa Josiah Marut <i>Symmetric Toeplitz Determinants for Starlike and Convex Functions Defined by Subordination</i>	WORKSHOP 7 <i>Creating Your First Interactive Tableau Dashboard for Data Visualisation</i> Dr. Teh Sin Yin
14:40 – 15:00	AM35-Paper ID: 0159 Kie Van Ivanky Saputra <i>Stocks Clustering with Fourier Transformation Towards Indonesian Stocks for Pairs Trading and Investment Diversification</i>	ST04-Paper ID: 0046 Mohsen Ayyash <i>What Explains the Gender Pay Gap in the West Bank?</i>		PM13-Paper ID: 0155 Khairun Nisak Muhammad <i>On Some Behaviour of Convergents for ϑ-Expansion and Regular Continued Fraction (RCF) Expansion</i>	

<p>15:00 – 15:20</p>	<p>AM30-Paper ID: 0141 Sanjith Udayakumar <i>Kinetic Modelling of Alkaline Leaching of Thorium Hydroxide (Th(OH)₄) from Monazite</i></p>	<p>ST05-Paper ID: 0053 Zi Yun Chow <i>Revisited Export-Led Growth Relationship: Does Trade Openness Matter?</i></p>		<p>PM01-Paper ID: 0028 Nur Asifa Mohd Ali <i>An Application of Fourier Transform Through Matlab in Classifying Tempos</i></p>
<p>15:20 – 15:40</p>	<p>AM36-Paper ID: 0171 Raihanah Adawiyah Shahrudin <i>Traffic Simulation Using Agent Based Modelling</i></p>	<p>ST12-Paper ID: 0129 Siti Fatimah Ismail <i>Investigating the Effects of Monetary Versus Fiscal Policies on GDP Growth in Malaysia: Smooth Transition Autoregressive (STAR) Approach</i></p>		
<p>15:40 – 16:00</p>	<p>AM21-Paper ID: 0110 Kong Voon Pang <i>Constrained Curve Interpolation in 3D</i></p>	<p>MS03-Paper ID: 0163 Chan Lay Guat <i>Multi-state Transition Model in Continuing Care Retirement Communities (CCRC): A Case Study</i></p>		