

2nd International Conference on Computational Sciences – Modelling, Computing and Soft Computing (CSMCS-2022)

28 March 2022 - 30 March 2022

Department of Mathematics, Manipal Institute of Tecnology, Manipal 576 104, India

DAY-2- 29 March 2022 ONLINE SESSION SCHEDULE

MS Team Link For Day 2: <https://tinyurl.com/ys48m3fv>

| Time | Programme | |
|---|--|---|
| Chairperson: Dr. Ramesha C., MIT, Manipal. | | |
| 9:30 AM-10:15AM | Keynote 5: Dr. S. S. N. Perera, University of Colombo, Sri Lanka Title: Modelling COVID-19 Spread in Sri Lanka and Challengers | |
| | Keynote 6 : Dr. A.P. James, IIIMK, Digital University, Kerala, India Title: Analog Memristive Computing | |
| 10:15 AM-11:00 AM | BREAK | |
| Chairperson: Dr. K. B. Srinivas., MIT, Manipal. | | |
| 11:15PM-12:00Noon | Keynote 7 : Dr. S. P. Tiwari, IIT Dhanbad, India. Title: Fuzzy Automata Based on Residuuated Lattices: A Mathematical Perspective | |
| | Keynote 8 : Dr. Saeid Jafar, College of Vestsjaelland South, Denmark Title: On Some Double Fuzzy Sets | |
| 12:00 Noon-12:45PM | Lunch Break | |
| Chairperson: Dr. Shobha M. E.,MIT, Manipal | | |
| 1:45PM-2:30PM | Keynote 9: Dr. Sudharshan Tiwari, TU of Kaiserslautern, Germany Title: Simulation of Moving Objects in Rarefied Gas | |
| | Keynote 10: Dr. Thorsten Hohage, George August Universitat Gottingen, Germany Title: Learned Infinite Elements | |
| 2:30PM-3:15PM | Keynote 11: Dr. Somanchi. V. S. S. N. V. G. Krishna Murthy, DIAT, Pune, India Title: Mathematical Modelling and its Application in Science & Technology | |
| | Keynote 11: Dr. Somanchi. V. S. S. N. V. G. Krishna Murthy, DIAT, Pune, India Title: Mathematical Modelling and its Application in Science & Technology | |
| Day 2-Oral Session 1 Time : 4:15PM-6:15PM | | |
| Chair: Dr. Sampath Kumar V. S., MIT, Manipal | | |
| MS Team Link for Oral Session 1: https://tinyurl.com/26a5zhev | | |
| Abstract ID | Presenting Author | Title of the paper |
| AbsID00185 | Papri Bhattacharjee | Numerical computation of 3D Brownian motion of thin film nanofluid flow of convective heat transfer |
| AbsID00200 | Sushma T. C. | INFLUENCE OF MHD AND HEAT TRANSFER ON FLUID FLOW - DTM APPROACH |
| AbsID00201 | SHIVAM SHUKLA | COST EFFICIENT ESTIMATION IN PRESENCE OF NON-RESPONSE AND MEASUREMENT ERRORS USING AUXILIARY VARIABLE |
| AbsID00215 | Satvik Surineedi | Secure File Sharing Using Bulwark File Access Protocol |

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| AbsID00218 | T Kusuma | Prediction of NAVs of Mutual Funds Using ARIMA Model |
| AbsID00175 | Chalissery Mincy Thomas | A New Metaheuristic Model To Predict Rainfall By Using Dynamical Parameters |

Day 2-Oral Session 2 Time : 4:15PM-6:15PM

Chair: Dr. Gowtham H. J., MIT, Manipal

MS Team Link for Oral Session 2: <https://tinyurl.com/yckurkvd>

| Abstract ID | Presenting Author | Title of the paper |
|-------------|------------------------|---|
| AbsID00226 | KAKALI ROY | APPROXIMATION OF FIXED POINTS FOR SUZUKI'S GENERALIZED REICH TYPE OF MAPPINGS IN BANACH SPACES |
| AbsID00222 | Raksha | New proof of S. Cooper's theta-function identities of level 6 |
| AbsID00224 | M.VENKATANARESH | Forgery Numeral Handwriting Detection using Convolutional Neural Network (CNN) |
| AbsID00228 | Mukesh Gupta | A new Modification in Quartic B-spline Differential Quadrature for Telegraph Equation |
| AbsID00230 | B. Anusha. | Several new closed form evaluation for the generalized hypergeometric functions |
| AbsID00232 | Anil Kumar | New Approximations of fractional Klein-Fock Gordon equations via Homotopy Perturbation transform Method |
| AbsID00238 | Sonu Kumar | A study on approximation of the functions by the generalized weighted class using product's means of conjugate Fourier series |
| AbsID00241 | Sauw Hritik Ramchandra | SOLVING THE TRAVELLING SALESMAN PROBLEM USING QUANTUM PHASE ESTIMATION ON A QUANTUM COMPUTER |

Day 2-Oral Session 3 Time : 4:15PM-6:15PM

Chair: Dr. Ashwini Bhat, MIT, Manipal

MS Team Link for Oral Session 3: <https://tinyurl.com/yck5tyx6>

| Abstract ID | Presenting Author | Title of the paper |
|-------------|-----------------------|---|
| AbsID00150 | KANIMOZHI V | Hidden Markov Model of Disease Progression and Control with reference to COVID-19 Spread |
| AbsID00157 | MARY ELIZABETH ANTONY | The Ideals and Z-filter of Hom-slice Hom(L, J) |
| AbsID00161 | V. Ramya | Smart Women Safety App |
| AbsID00111 | Salma Fauzia | Analysing Health Care Using Machine Learning |
| AbsID00167 | Ligin P Mathew | An introduction to Single Valued Neutrosophic Fuzzy Numbers, Trapezoidal Single Valued Neutrosophic Fuzzy Numbers and Triangular Single Valued Neutrosophic Fuzzy Numbers |
| AbsID00135 | Dr. S.M.CHITHRA | Min-Max Game Theory form a Partial Differential Equation Systems in Fluid Structure |

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| AbsID00245 | NITISH PRASAD | Design of horizontal axis axial flow hydrokinetic turbine |
| AbsID00248 | Nitesh Narayan | A Mathematical Model for spreading of misinformation in Online Social Networks |

Day 2-Oral Session 4 Time : 4:15PM-6:15PM

Chair: Dr. Rekha G. Pai, MIT, Manipal

MS Team Link for Oral Session 4: <https://tinyurl.com/2p8cnjv6>

| Abstract ID | Presenting Author | Title of the paper |
|--------------------|--------------------------|--|
| AbsID00180 | Keerthana A | A Machine Learning Algorithm To Predict Groundwater Levels Over Kerala: Fixed-Step Validation Approach |
| AbsID00184 | JAIN M. FRANCIS | Solutions Of Black-Scholes Equation Using Neural Networks |
| AbsID00191 | Jeena M S | On Some Extensions of Complex Valued Fuzzy Metric Spaces and Fixed Point Theorems |
| AbsID00193 | Kavitha S | Analysis of Forchheimer effect for double diffusive convection with dusty fluids and MHD |
| AbsID00194 | Kalyan Boyina | Wave Propagation Analysis in Visco Elastic Timoshenko Nano beams under surface stress effects based on Nonlocal strain gradient theory |
| AbsID00203 | Priyanka | An HIV-TB co-infection model with multi drug resistant strain |
| AbsID00237 | Dr. Manjula G. J. | DISPERSION OF SOLUTE IN A FULLY DEVELOPED FLOW OF A BOUSSINESQ STOKES SUSPENSION BOUNDED BY POROUS BEDS |
| AbsID00176 | Prameela S. Bhanu | Modelling Of Daily Rainfall Using Dynamic Chow-Lin Method |

Day 2-Oral Session 5 Time : 4:15PM-6:15PM

Chair: Dr. D. Anu Radha, MIT, Manipal

MS Team Link for Oral Session 5: <https://tinyurl.com/jvwn86v2>

| Abstract ID | Presenting Author | Title of the paper |
|--------------------|--------------------------|--|
| AbsID00207 | Dr. Santoshi Misra | A COMPUTATIONAL ANALYSIS OF NANOFLUID FLOW TRAVERSING A SHRINKING SHEET UNDER THE INFLUENCE OF CHEMICAL REACTION WITH HEAT AND MASS TRANSFER PHENOMENA |
| AbsID00221 | Tatapudi Ashok | Crop Prediction Using a Novel Machine Learning Ensemble Network |
| AbsID00225 | Maya S.S. | A Comparative Study of M/M/1 and M/M/2 Queuing Models of patient flow in a health centre |
| AbsID00227 | N. S. Gopal | Solutions of Hilfer-type Discrete Fractional Boundary Value Problem |
| AbsID00229 | Britto Jacob S | Analysis of Discrete-Time Fractional Order SIR Model with Carrying Capacity |

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|-------------------|---------------------|---|
| AbsID00231 | Varun Mishra | Numerical Study on Hydrokinetic Turbine |
| AbsID00236 | PINKI | Stochastic and Cost-Benefit Analysis of Two-Unit Gas Turbine System Considering the Effect of Humidity for Temperature (50C-250C) |
| AbsID00243 | Dr. Hemanth Kumar C | Modeling the Fatigue Strength of Fiber Reinforced Composites Using Artificial Neural Networks |
| AbsID00205 | Imed Bouaker | Asymptotic Properties of the High-risk point kernel functional estimation for the Quasi-associated data (spatial model) |

Day 2-Oral Session 6 Time : 4:15PM-6:15PM

Chair: Dr. Babitha K. V., Govt. College, Kerala

MS Team Link for Oral Session 6: <https://tinyurl.com/mwtejmj5>

| Abstract ID | Presenting Author | Title of the paper |
|--------------------|--------------------------|---|
| AbsID00168 | SANGEETHA T S | Development Of A Software-Based Driving System Module For Lower Limb Exoskeleton |
| AbsID00171 | Sanjitha R | Similarity measure and Distance measure of multiple sets. |
| AbsID00172 | Kadeeja Mole K. P. | Identify Most dangerous path to travel from one cluster to another cluster of countries of a particular order |
| AbsID00179 | Aparna Sivadas | Fermatean Fuzzy Soft Topological Spaces |
| AbsID00196 | Pradeebha G | AIR POLLUTION VARIATION DUE TO LOCKDOWN IN KOCHI |
| AbsID00220 | SHAHANA A R | Some Fixed Point Theorems in Complete E-Fuzzy Metric Spaces |
| AbsID00242 | K L Swarna | Determinants of Complex Fuzzy Soft Matrices |

Day 2-Oral Session 7 Time : 4:15PM-5:30PM

Chair: Dr. Shijina V. Co-Operative Arts and Science College, Madayi, Kerala

MS Team Link for Oral Session 7: <https://tinyurl.com/4dehyxwy>

| Abstract ID | Presenting Author | Title of the paper |
|--------------------|--------------------------|--|
| AbsID00130 | Kamalpreet Kaur | On weak forms of bi-ideal nano open sets |
| AbsID00131 | SHRUTI MISHRA | Service Discovery and Selection in Quantum based Mobile Ad-hoc Network |
| AbsID00139 | Durgadevi P | Morphism Properties on Rough Fuzzy Ideals in \square Rings |
| AbsID00144 | Dr. V. Jyothsna | A Novel approach for Intrusion Detection using Bio-Inspired and Ensemble Technique |
| AbsID00163 | Salsabeela V | TOPSIS Techniques on Picture Fuzzy Soft Sets |
| AbsID00247 | A. ANGEL MARINA | Generalized Alpha Connectedness in Neutrosophic Vague Refined Topological Spaces |

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| AbsID00192 | Sowmya K | More on Fuzzy Riesz IG– submodule |
| AbsID00197 | Dr. Priyanka Pal | Reversible L-valued automata : Algebraic Characterizations |
| AbsID00199 | Faiz atahar | Obtaining an almost Quintic Spline function in complex plane |

Day 2-Oral Session 8 Time : 4:15PM-6:15PM

Chair: Dr. P. S. K. Reddy, JSSTU, Mysuru

MS Team Link for Oral Session 8: <https://tinyurl.com/439yp5ks>

| Abstract ID | Presenting Author | Title of the paper |
|-------------|---------------------|---|
| AbsID00149 | Anandhu Mohan | Fuzzy Median Graph Algorithm for p-Median Facility Location Problem |
| AbsID00178 | Salu S | On μn – Fuzzy Graphs |
| AbsID00151 | KRISHNAVENI M | MATROID AND MINIMUM SPANNING TREE |
| AbsID00155 | Shiny Joseph | Relation between Total Induced Vertex Stress and Wiener index of a Graph |
| AbsID00156 | Mary Imelda | Interval Graphs, Tolerance Graphs -It's Applications |
| AbsID00159 | W. Anjaline | Minimum neighborhood domination of trees |
| AbsID00162 | Antony Sanoj Jerome | GAUSSIAN TOTAL NEIGHBOURHOOD PRIME LABELING OF CYCLES AND SOME CYCLE RELATED GRAPHS |
| AbsID00186 | P. SHANTHI | CHANGING AND UNCHANGING OF SOME DOMINATING PARAMETERS IN ARITHMETIC GRAPHS |

Day 2-Oral Session 9 Time : 4:15PM-6:15PM

Chair: Dr. Sujatha H. S., MIT, Manipal

MS Team Link for Oral Session 9: <https://tinyurl.com/3386nnttr>

| Abstract ID | Presenting Author | Title of the paper |
|-------------|--------------------|---|
| AbsID00210 | Dr. Shikhi M | Roman Domination Matrix |
| AbsID00217 | Sabitha Jose | Equitable Near Proper Coloring of Some Graph Classes |
| AbsID00223 | Deepa V. G. | A Survey of Certain Graph Theoretical Parameters for Analyzing a Social Network |
| AbsID00190 | Jebin Jacob | Einstein Fuzzy Graphs |
| AbsID00233 | FARISA M | Geodetic Number and Edge Geodetic Number in Labeled Graphs |
| AbsID00235 | Reeja Kuriakose | Unbiased domination in Graphs |
| AbsID00239 | Toby B Antony | On Circulant Completion of Graphs |
| AbsID00240 | Shashwath S Shetty | The Wiener Index of k-Nested Graphs |