



## 8<sup>th</sup> International Conference on Mathematics and Computing (ICMC 2022)

(An Online Conference)

6<sup>th</sup>-8<sup>th</sup> January 2022

Schedule

[India Standard Time](#)

Day 1 : 06-01-2022		
TIME	EVENTS	LINK
9.30 a.m.-11.00 a.m.	<b>Inauguration</b>	<a href="#">Link</a> Meeting ID: 824 5514 8254 Passcode: 658084
11.00 a.m.-12.00 p.m.	<b>Session 1-</b> Keynote Speaker: <b>Albert Y. Zomaya</b> , <i>The University of Sydney Sydney, Australia.</i> <b>Title Of the Talk:</b> <i>Managing Edge Ecosystems: Challenges and Opportunities.</i>  <i>Session Chair: Ch. Aswani Kumar</i> <i>School of Information Technology and Engineering, VIT, India</i> <i>Moderator: Sivaraj R</i>	<a href="#">Link</a> Meeting ID: 824 5514 8254 Passcode: 658084
12.00 p.m.-01.00 p.m.	<b>Session 2-</b> Keynote Speaker: <b>Somesh Kumar</b> , <i>IIT, Kharagpur, India.</i> <b>Title Of the Talk:</b> <i>Estimating Parameters in Scale Mixtures of Location-Scale Distributions.</i>  <i>Session Chair: P D Srivastava, IIT, Bhilai.</i> <i>Moderator: Sivaraj R</i>	<a href="#">Link</a> Meeting ID: 824 5514 8254 Passcode: 658084
01.00 p.m.-02.00 p.m.	<b>Lunch Break</b>	
02.00 p.m.-03.00 p.m.	<b>Session 3-</b> Keynote Speaker: <b>Satnam Singh</b> , <i>Chief Data Scientist at Acalvio Technologies, Bengaluru, India.</i> <b>Title Of the Talk :</b> <i>Machine Learning for CyberSecurity: An Industrial Perspective.</i>  <i>Session Chair: Debasis Giri, Maulana Abul Kalam Azad University of Technology, India.</i> <i>Moderator: Sivaraj R.</i>	<a href="#">Link</a> Meeting ID: 824 5514 8254 Passcode: 658084

03.00 p.m.-04.00 p.m.	<p><b>Session 4-</b> Keynote Speaker: <b>Maribel Fernandez</b>, King's College London, UK.</p> <p><b>Title Of the Talk:</b> <i>CBDA: A Data-Sharing Model for Privacy-Preserving Cloud-IoT Architectures</i></p> <p>Session Chair: <b>Barbara Carminati</b>, University of Insubria, Italy. Moderator: <b>Sivaraj R.</b></p>	<p><a href="#">Link</a> Meeting ID: 824 5514 8254 Passcode: 658084</p>
04.00 p.m.-06.00 p.m.	<p><b>Paper Presentation session 1</b> <b>CFD</b> Session Chair: <b>Panchatcharam Mariappan</b>, IIT Tirupati, India.</p> <p>Paper ID: 39, 55, 80, 102, 148, 156, 157, 288.</p>	<p><a href="#">Link</a> Meeting ID: 861 5881 9395 Passcode: 273194</p>
	<p><b>Paper Presentation session 2</b> <b>Computing</b> Session Chair: <b>Jaydeb Bhaumik</b>, Jadavpur University, India.</p> <p>Paper ID: 77, 87, 104, 107, 172, 173, 183.</p>	<p><a href="#">Link</a> Meeting ID: 840 8506 9900 Passcode: 821557</p>
	<p><b>Paper Presentation session 3</b> <b>Fractional Calculus</b> Session Chair: <b>Moumita Mandal</b>, IIT Jodhpur.</p> <p>Paper ID: 2, 99, 108, 124, 138, 143, 174, 291.</p>	<p><a href="#">Link</a> Meeting ID: 811 6654 9553 Passcode: 838445</p>
	<p><b>Paper Presentation session 4</b> <b>Algebra and Analysis</b> Session Chair: <b>Shakir Ali</b>, AMU, India.</p> <p>Paper ID: 40, 57, 82, 95, 132, 142, 149, 220.</p>	<p><a href="#">Link</a> Meeting ID: 825 4812 0922 Passcode: 022221</p>



## 8th International Conference on Mathematics and Computing (ICMC 2022)

Day 2 : 07-01-2022		
TIME	EVENTS	LINK
09.00 a.m.-10.00 a.m.	<p><b>Session 5-</b> Keynote Speaker: <b>Jiawei Han</b>, University of Illinois, USA.  <b>Title Of the Talk:</b> Mining Unstructured Text Data by Weakly Supervised Machine Learning.</p> <p>Session Chair: <b>Bhavani Thuraisingham</b>, The University of Texas at Dallas, USA.  Moderator: Pallavi Mishra.</p>	<p><a href="#">Link</a>  Meeting ID: 824 5514 8254  Passcode: 658084</p>
10.00 a.m.-11.00 a.m.	<p><b>Session 6-</b> Keynote Speaker: <b>Padmanabhan Seshaiyar</b>, George Mason University, USA.  <b>Title Of the Talk:</b> Mathematical modeling and computing to study the influence of common mitigation strategies on the spread of COVID-19.</p> <p>Session Chair: <b>Jitesh Gajjar</b>, University of Manchester, Manchester.  Moderator: Peri Kameshwara Kameshwaran.</p>	<p><a href="#">Link</a>  Meeting ID: 824 5514 8254  Passcode: 658084</p>
11.00 a.m.-01.00 p.m.	<p><b>Paper Presentation session 5</b>  <b>Graph Theory and Fuzzy algebra</b>  Session Chair : <b>Somasundaram K</b>, Amrita, CB, India.  Paper ID: 14, 15, 38, 86, 92, 105, 127, 154.</p>	<p><a href="#">Link</a>  Meeting ID: 890 0307 5546  Passcode: 068697</p>
	<p><b>Paper Presentation session 6</b>  <b>Complex Analysis and Integral Equations</b>  Session Chair : <b>Swadesh Kumar Sahoo</b>, IIT Indore, India.  Paper ID: 21, 24, 36, 259, 261, 270, 276, 281.</p>	<p><a href="#">Link</a>  Meeting ID: 825 1832 6281  Passcode: 425506</p>
	<p><b>Paper Presentation session 7</b>  <b>Computing</b>  Session Chair : <b>Sanasam Ranbir Singh</b> , IIT Guwahati.  Paper ID: 167, 187, 197, 221, 235, 277, 307, 315, 323.</p>	<p><a href="#">Link</a>  Meeting ID: 810 2777 4600  Passcode: 618977</p>
	<p><b>Paper Presentation session 8</b>  <b>Solid Mechanics, Numerical analysis</b>  Session Chair : <b>Smruthiranjana Mohapatra</b>, VSSUT, Orissa, India.  Paper ID: 52, 139, 185, 278, 294, 300, 311, 321.</p>	<p><a href="#">Link</a>  Meeting ID: 846 5049 0490  Passcode: 848699</p>

01.00 p.m.-02.00 p.m.	<b>Lunch Break</b>	
02.00 p.m.-03.00 p.m.	<p><b>Session 7-</b> Keynote Speaker: <b>Árpád Baricz</b>, Babes-Bolyai University, Cluj-Napoca, Romania, Obuda University, Budapest, Hungary.</p> <p><b>Title Of the Talk:</b> Riemann-Hilbert problems and zeros of orthogonal polynomials associated to the generalized Jacobi weight.</p> <p>Session Chair: <b>S Ponnusamy</b>, IIT Madras, India. Moderator: <b>S Jagatheswari</b>.</p>	<a href="#">Link</a> Meeting ID: 824 5514 8254 Passcode: 658084
03.00 p.m.-04.00 p.m.	<p><b>Session 8-</b> Keynote Speaker: <b>Anders Karlsson</b>, Universitié de Genève, Switzerland, Uppsala University, Sweden.</p> <p><b>Title Of the Talk:</b> Metric frameworks for deep learning: deep limits and a cut-off depth.</p> <p>Session Chair: <b>S Ponnusamy</b>, IIT Madras, India. Moderator: <b>Peri Kameshwara Kameshwaran</b>.</p>	<a href="#">Link</a> Meeting ID: 824 5514 8254 Passcode: 658084
04.00 p.m.-06.00 p.m.	<p><b>Paper Presentation session 9</b>  <b>Numerical Analysis</b>  Session Chair : <b>Natarajan E</b>, IIST, Thiruvananthapuram, India.  Paper ID: 8, 11, 18, 71, 73, 94, 103, 113, 170.</p>	<a href="#">Link</a> Meeting ID: 882 0345 5234 Passcode: 676545
	<p><b>Paper Presentation session 10</b>  <b>Operational Research, Dynamical Systems, Solid Mechanics</b>  Session Chair : <b>Mahesha Narayana</b>, UWI, Jamaica.  Paper ID: 28, 30, 88, 89, 147, 209, 214, 247, 249.</p>	<a href="#">Link</a> Meeting ID: 862 0775 5755 Passcode: 057664
	<p><b>Paper Presentation session 11</b>  <b>CFD</b>  Session Chair : <b>S Srinivas</b>, VIT AP, India.  Paper ID: 67, 232, 242, 280, 282, 286, 289, 319, 322, 335, 336.</p>	<a href="#">Link</a> Meeting ID: 828 7763 7946 Passcode: 444909
	<p><b>Paper Presentation session 12</b>  <b>Mathematical Analysis</b>  Session Chair: <b>Sanjeev Singh</b>, IIT, Indore, India.  Paper ID: 51, 54, 60, 65, 72, 84, 320, 324.</p>	<a href="#">Link</a> Meeting ID: 861 3070 7788 Passcode: 895338
	<p><b>Paper Presentation session 13</b>  <b>Operational Research, Analysis, Integral Equations</b>  Session Chair : <b>G Murugusundaramoorthy</b>, VIT, Vellore, India.  Paper ID: 22, 64, 169, 318, 325, 327, 328, 330.</p>	<a href="#">Link</a> Meeting ID: 845 1273 5882 Passcode: 264116
06.00 p.m.-07.00 p.m.	<b>Cultural Program</b>	<a href="#">Link</a> Meeting ID: 824 5514 8254 Passcode: 658084



## 8th International Conference on Mathematics and Computing (ICMC 2022)

Day 3 : 08-01-2022		
TIME	EVENTS	LINK
09.00 a.m.-10.00 a.m.	<p><b>Session 9-</b> Keynote Speaker: <b>Sivaguru S. Sritharan</b>, Chief Technologist, Go.AI, Inc, Ohio, USA. <b>Title Of the Talk:</b> Stochastic Navier-Stokes Equations: Control, Filtering, Ergodicity, Large Deviations And Malliavin Calculus.</p> <p>Session Chair: <b>P G Siddheshwar</b>, CHRIST, Bangalore India. Moderator: <b>M S Jagadeesh Kumar</b>.</p>	<p><a href="#">Link</a> Meeting ID: 824 5514 8254 Passcode: 658084</p>
10.00 a.m.-11.00 a.m.	<p><b>Session 10-</b> Keynote Speaker: <b>Ashuwin Vaidya</b>, Montclair State University, USA. <b>Title Of the Talk:</b> A network theoretic approach to mathematics education.</p> <p>Session Chair: <b>P S Rao</b>, IIT, Dhanbad, India. Moderator: <b>M S Jagadeesh Kumar</b>.</p>	<p><a href="#">Link</a> Meeting ID: 824 5514 8254 Passcode: 658084</p>
11.00 a.m.-01.00 p.m.	<p><b>Paper Presentation session 14</b> <b>CFD</b> Session Chair : <b>Om P Suthar</b>, MNIT, Jaipur, India.  Paper ID: 119, 179, 186, 199, 200, 201, 208, 298.</p>	<p><a href="#">Link</a> Meeting ID: 818 6007 7435 Passcode: 737141</p>
	<p><b>Paper Presentation session 15</b> <b>Computing</b> Session Chair : <b>Biswapati Jana</b>, Vidyasagar University, India.  Paper ID: 190, 233, 244, 252, 255, 271, 292.</p>	<p><a href="#">Link</a> Meeting ID: 850 3598 8578 Passcode: 816041</p>
	<p><b>Paper Presentation session 16</b> <b>Operational Research</b> Session Chair : <b>K Karthikeyan</b>, VIT, Vellore India. Paper ID: 23, 34, 59, 66, 79, 182, 297, 301.</p>	<p><a href="#">Link</a> Meeting ID: 824 6486 1781 Passcode: 467452</p>
	<p><b>Paper Presentation session 17</b> <b>Fuzzy logic</b> Session Chair: <b>Balamurugan B J</b>, VIT, Chennai, India. Paper ID: 146, 177, 309, 326, 329, 332, 333, 334.</p>	<p><a href="#">Link</a> Meeting ID: 871 2096 4782 Passcode: 653543</p>
01.00 p.m.-02.00 p.m.	<b>Lunch Break</b>	

02.00 p.m.-03.00 p.m.	<p><b>Session 11-</b> Keynote Speaker: <b>Elena Ferrari</b>, University of Insubria, Italy.  <b>Title Of the Talk:</b> <i>Securing business process execution through blockchain.</i></p> <p>Session Chair: <b>Sedat Akleyek</b>, Ondokuz Mayıs University, Turkey.  Moderator: <b>Sunanda Saha.</b></p>	<p><a href="#">Link</a>  Meeting ID:  824 5514 8254  Passcode:  658084</p>
03.00 p.m.-04.00 p.m.	<p><b>Session 12-</b> Keynote Speaker: <b>Siddhartha Pratim Chakrabarty</b>, IIT Guwahati, India.  <b>Title Of the Talk:</b> <i>Transitioning to a Decarbonized Economy: Quantifying the Carbon Transition Risk.</i></p> <p>Session Chair: <b>K Karthikeyan</b> , VIT, Vellore, India.  Moderator: <b>Sunanda saha.</b></p>	<p><a href="#">Link</a>  Meeting ID:  824 5514 8254  Passcode:  658084</p>
04.00 p.m.- 05.00 p.m.	<p><b>Valedictory</b></p>	<p><a href="#">Link</a>  Meeting ID:  824 5514 8254  Passcode:  658084</p>

**All timings are in Indian Standard Time (IST): GMT +5:30.**

Join Paper Presentation sessions on Zoom with the corresponding meeting link.

For *Inauguration/ Keynote Sessions/ Cultural Program/ Valedictory* meeting link:

<https://vit-ac-in.zoom.us/j/82455148254?pwd=Mzd5NWcrWXltem5DRmhKcjVkTm4ydz09>

Meeting ID: 824 5514 8254

Passcode: 658084

Date: 06-01-2022

Time: 04.00 p.m.-06.00 p.m.

Paper Presentation Session 1: CFD

Link: [Link](#)

Meeting ID: 861 5881 9395 Passcode: 273194

Session Chair: **Panchatcharam Mariappan**, IIT Tirupati , India.Co-chair: **Badeti Satyanarayana**, VIT, AP, India.

Moderator: Gomathy G.

Paper ID	Author	Title	Category
39	<b>Asim Kumar Das</b> , Subhas Chandra Rana	Comparative Analysis of Flow in S - Diffusers Using Standard K- $\epsilon$ , Realizable K- $\epsilon$ and Renormalized Group K- $\epsilon$ Models.	CFD
55	<b>Abhijeet Adhe</b> , Kirtiwant Ghadle	Thermal Stress Analysis of Inhomogeneous Infinite Solid to 2D Elasticity of Thermoelastic Problems	CFD
80	<b>Mahesh Udupa</b> , Sunanda Saha	Study of Non-Newtonian models for 1D Blood flow through a Stenosed Carotid Artery	CFD
102	<b>Hemalatha R</b> , Kameswara, Kameswaran Peri	Mixed Convective Flow on Nanoparticle Shape Effects over a Stretching Sheet	CFD
148	<b>Subha Pal</b> and Duranta Chutia	On generalized energy inequality of the damped Navier-Stokes equations with Navier-slip boundary conditions	CFD
156	<b>Suneetha Sangapatnam</b> , Subbarayudu Ketineni, Bala Anki Reddy Polu and Rizwan Ul Haq Satti	The Diathermic Oils Over A Thin Liquid Film With Mos2 Nano Particles: A Model With Analysis Of Shape Factor Effects	CFD
157	<b>Biman Sarkar</b> and Soumen De	Dissipation of wave energy by thin multiple partially immersed vertical porous walls in water of uniform finite depth	CFD
288	Sreedhara Rao Gunakala, <b>Victor Job</b> and Jennilee Veronique	Influence of Heat Transfer, Chemical Reaction and Variable Fluid Properties on Oscillatory MHD Couette Flow through a Partially-Porous Channel	CFD

Date: 06-01-2022

Time: 04.00 p.m.-06.00 p.m.

Paper Presentation Session 2: **Computing**

Link: [Link](#)

Meeting ID: 840 8506 9900 Passcode: 821557

Session Chair: **Jaydeb Bhaumik**, Jadavpur University, India.

Co-chair: **Jitendra Kumar**, VIT, Vellore.

Moderator: Rajamani S.

Paper ID	Author	Title	Category
77	<b>Shekhar Karanwal</b>	Color Multiscale Block-ZigZag LBP (CMB-ZZLBP): An Efficient and Discriminant Face descriptor	Computing
87	<b>Anjali Dhiman,</b> Balakrishnan S	Effect of noise in the quantum network implementation of cop and robber game	Quantum Theory
104	<b>Pankaj Singh,</b> Neema Bhandari, Neeraj Bisht, Shilpi Bisht	Design of Energy Efficient IoMT Electrocardiogram (ECG) machine on 28 nm FPGA	Machine Learning
107	<b>A. V. S Kameshwari,</b> S Balakrishnan	Study of decoherence in quantum Cournot duopoly game using modified EWL scheme	Quantum Theory
172	Paulraj S and <b>Tamilarasi G</b>	A New Aggregation Method for Single Valued Triangular Neutrosophic Number in Decision Making	Decision Making Theory
173	<b>Ghurumuruhan Ganesan</b>	Redundancy of Linear Codes with Graph Constraints	Coding
183	<b>Ishak Meraouche,</b> Sabyasachi Dutta, Haowen Tan and Kouichi Sakurai	Tree Parity Machine based Symmetric Encryption: a Hybrid Approach	Coding



Date: 06-01-2022

Time: 04.00 p.m.-06.00 p.m.

Paper Presentation Session 3: **Fractional Calculus**Link: [Link](#)

Meeting ID: 811 6654 9553 Passcode: 838445

Session Chair: **Moumita Mandal, IIT Jodhpur.**Co-chair: **C Monica, VIT, Vellore.**

Moderator: Sowmiya C.

Paper ID	Author	Title	Category
2	<b>Biplab Dhar</b>	Analysis of a CoVID-19 Model with Memory Effect by ABC Fractional Derivative	Fractional Calculus
99	<b>G Tamil Preethi, N. B. Gatti, N. Magesh</b>	An application of conformable fractional differential transform method for smoking epidemic model	Fractional Calculus
108	<b>Gopal N.S.</b> , Jagan Mohan Jonnalagadda , Shobanadevi N	Two-Point Discrete Fractional Boundary Value Problem with Non-Local Boundary Condition	Fractional Calculus
124	<b>Rajesh Teppawar,</b> Rajkumar Ingle, Raju Muneshwar	Solution of Fractional Differential Equations by using Conformable Fractional Differential Transform Method with Adomain Polynomials	Fractional Calculus
138	Raju Muneshwar, Kirankumar Bondar, Yogesh Shirole, <b>Vijaykumar Mathpati</b>	Generalized results on Existence & Uniqueness with Wronskian and Abel Formula for $\alpha$ -Fractional Differential Equations	Fractional Calculus
143	<b>Dulashini Karunarathna</b> and Mangalagama Dewasurendra	Method of Directly Defining the Inverse Mapping for Nonlinear Ordinary and Partial Fractional Order Differential Equations	Fractional Calculus
174	<b>Kshirod Sarkar</b> and Biswajit Mondal	Analysis of a Fractional Order Predator-Prey Model With Nonlinear Harvesting	Fractional Calculus
291	<b>M. Latha Maheswari</b> and R. Nandhini	Existence results for nonlocal impulsive fractional neutral functional integro-differential equations with bounded delay	Fractional Calculus

Date: 06-01-2022

Time: 04.00 p.m.-06.00 p.m.

Paper Presentation Session 4: **Algebra and Analysis**Link: [Link](#)

Meeting ID:825 4812 0922 Passcode: 022221

Session Chair: **Shakir Ali**, AMU, India.Co-chair: **V Madhu**, VIT, Vellore.

Moderator: Dineshkumar C.

Paper ID	Author	Title	Category
40	<b>Aritra Dutta</b> , A.K. Das	On Some Properties of $SK$ - type Block Matrices in the context of Complementarity Problem	Linear Algebra
57	<b>Krishna Kant Mishra</b> , Abhishek Singh, Shilpi Bist	New Eigenvalues Bounds For Taylor-Goldstein Equation	Linear Algebra
82	<b>Renz Jimwel Mina</b> , Jerico Bacani	Families of Mordell curves with non-trivial torsion and rank of at least three	Linear Algebra
95	<b>Mohit Kumar</b> , Neelesh S. Upadhye	Linear Recurrent Fractal Interpolation Function for Data Set with Gaussian Noise	Analysis
132	<b>Vijay Vijay</b> , A. K. B. Chand	$C^1$ -Rational Quadratic Trigonometric Spline Fractal Interpolation Functions	Analysis
142	<b>Pasupathi Rajan</b> , Arya Kumar Bedabrata Chand, María A. Navascués	Cyclic Multivalued Iterated Function Systems	Analysis
149	Ekrem Savas	On almost convergence and statistical Convergence of weight $g$	Analysis
220	<b>Tamilarasi W</b> and Balamurugan B J	Non-Neighbor Topological Indices On Covid-19 Drugs With QSPR Analysis	Analysis

Date: 07-01-2022

Time: 11.00 a.m.-01.00 p.m.

Paper Presentation Session 5: **Graph Theory and Fuzzy Algebra**

Link: [Link](#)

Meeting ID: 890 0307 5546 Passcode: 068697

Session Chair: **Somasundaram K**, Amrita, CB, India.

Co-chair: **Sharief Basha.S**, VIT, Vellore.

Moderator: Hemalatha R.

Paper ID	Author	Title	Category
14	<b>Levaku Madhavi</b> , Jangiti Devendra, Tippaluri Nagalakshumma	Edge Domination Of The Zero-Divisor Cayley Graph Of Residue Class Ring $(Z_N, \oplus, \odot)$	Graph Theory
15	Selvakumar Krishnan, <b>Karthik Shunmugaiah</b>	On the genus of the annihilator-ideal graph of commutative ring	Graph Theory
38	<b>Garima Bisht</b> , Sanjay Kumar	Fuzzy rule based expert system for multi assets portfolio optimization	Fuzzy Algebra
86	<b>Niranjan P K</b>	The Radio $\$k\$$ -chromatic Number for the Corona of Arbitrary Graph and $\$K_1\$$	Graph Theory
92	<b>Dr. Latha Devi</b> Puli, Dr. Manjula K	Some Parameters of Restricted Super Line Graphs	Graph Theory
105	<b>Bhuvaneshwari Ganesan</b> , Manivannan Annamalai	Stability analysis of additive time varying T-S fuzzy system using augmented lyapunov functional	Fuzzy Algebra
127	<b>Ghurumuruhan Ganesan</b>	Edge Constrained Eulerian Extensions	Graph Theory
154	<b>Chinglensana Phanjoubam</b> and Sainkumar Mawiong	Bounds of some energy-like invariants of neighbourhood corona of graphs	Graph Theory

Date: 07-01-2022

Time: 11.00 a.m.-01.00 p.m.

Paper Presentation Session 6: **Complex Analysis and Integral equations**

Link: [Link](#)

Meeting ID: 825 1832 6281 Passcode: 425506

Session Chair: **Swadesh Kumar Sahoo**, IIT Indore, India.

Co-chair: **M. Prakash**, VIT, Vellore.

Moderator: Sowmiya C.

Paper ID	Author	Title	Category
21	<b>Rahul</b> , Nihar Kumar Mahato	Solvability of Infinite System of Volterra Integral Equations in the Tempered Spaces	Integral Equation
24	<b>Tejuswini M</b> , Shilpa N	Some Results on Differential Polynomials of Meromorphic Functions Sharing Certain Values	Complex Analysis
36	<b>S. V. Babar</b> , S. G. Latpate	On Generalizations of Integral Inequalities and Its Applications	Integral Equation
259	<b>S.Prathiba S.Prathiba</b> , Thomas Rosy and G. Murugusundaramoorthy	Fekete-Szego Inequality for Analytic and Bi-Univalent Functions Related with Horadam Polynomials	Complex Analysis
261	Gangadharan Murugusundaramoorthy, Thomas Rosy and <b>Asha Thomas</b>	New Subclass Of Pseudo-Type Meromorphic Bi-Univalent Functions Of Complex Order Based On Erdelyi-Kober Type Integral Operator	Complex Analysis
270	<b>Malathi V</b> and Vijaya K	Bi- Starlike function of complex order based on double Zeta functions associated with crescent shaped region	Complex Analysis
276	<b>K. Saritha</b> and Dr.K. Thilagavathi	Fekete -Szego inequalities for certain analytic functions defined by q-difference error function related to Shell sheped region	Complex Analysis
281	<b>Dr.N. Shobanadevi</b> and Dr.K. Thilagavathi	Majorization results for certain subclass of Starlike functions of complex order involving Generalised Polylogarithms	Complex Analysis

Date: 07-01-2022

Time: 11.00 a.m.-01.00 p.m.

Paper Presentation Session 7: **Computing**

Link: [Link](#)

Meeting ID: 810 2777 4600 Passcode: 618977

Session Chair: **Sanasam Ranbir Singh**, IIT Guwahati.

Co-chair: **Ashish Bhatt**, VIT, Vellore.

Moderator: Gomathy G.

Paper ID	Author	Title	Category
167	<b>Nancy A</b> and Balakrishnan S	Non-local characteristics of deleting machine	Quantum Computing
187	<b>Shikha Patel</b> and Om Prakash	Skew Polycyclic & Skew Sequential Codes and their Application to MDS Codes	Coding
197	<b>Prabhash Kumar Singh</b> , Biswapati Jana and Kakali Datta	Rotation Invariant Data Hiding Scheme using SIFT Keypoints	Cryptography
221	<b>Manasi Jana</b> , Biswapati Jana and Shubhankar Joardar	RDH based Image Authentication and Tampered Detection Scheme Exploiting Local Binary Pattern For Overlapped Interpolated Image	Image Processing
235	<b>Debasish Patra</b> and Biswapati Jana	Fake News Detection Using NLP with Machine Learning	Machine Learning
277	<b>Subodh Kumar</b>	Codes Capable to Detect and Correct Repeated Restricted Burst Errors Occurring in Sub-blocks	Coding
307	<b>Tanuj Kumar</b>	A study of Linear canonical Hankel Wavelet transformation	Image and Signal Processing
315	<b>Victor A</b> , Khadar Babu SK	Optimal Initial Value Approach for the Holts-Winters Additive Method	Computing
323	<b>Kavitha K</b> , V. Vijayakumar	Results on approximate controllability of Hilfer fractional Sobolev type differential system	Control Theory

Date: 07-01-2022

Time: 11.00 a.m.-01.00 p.m.

Paper Presentations Session 8: **Solid Mechanics, Numerical analysis**

Link: [Link](#)

Meeting ID: 846 5049 0490 Passcode: 848699

Session Chair: **Smruthirajan Mohapatra**, VSSUT, Orissa, India.

Co-chair: **Sanjay Kumar Mohanty**, VIT, Vellore.

Moderator: Padmaja K.

Paper ID	Author	Title	Category
52	<b>Archana Varsoliwala</b> and Dr. Twinkle Singh	Mathematical modeling of tsunami wave propagation at mid ocean and its amplification and run-up on shore	Solid Mechanics
139	<b>Jharna Tamang</b> and Asit Saha	Bifurcation and multistability of dust-ion-acoustic waves under the Burgers equation with superthermal charge fluctuation in magnetized plasmas	Solid Mechanics
185	<b>Krishna Veni</b> and Chirala Satyanarayana	Adaptive subsampling method with a variable optimal shape parameter for one dimensional RBF interpolation	Numerical Analysis
278	<b>Mithun Sundhar B</b> and Girish Kumar Rajan	Rheological Investigation of Sea Surface Films	Solid Mechanics
294	<b>Sathiyabama Ramanujam</b>	Quantum correlations in the bipartite displaced thermal state via nonlocal photon addition	Solid Mechanics
300	Temesgen A, Prabakaran K and <b>Lalithamani N</b>	Block Procedure for Doing Legendre Polynomials of Numerical Solutions in Ordinary Differential Equation	Numerical Analysis
311	<b>Anil Negi</b>	Analytical Investigation on the behaviour of Love waves propagating through the surface irregularity in an orthotropic composite structure	Solid Mechanics
321	<b>Ritika Singh</b>	Transient Response of Collinear Griffith Cracks in a Functionally Graded Strip Bonded between Dissimilar Elastic Strips under Shear Impact Loading	Solid Mechanics

## Paper Presentation Session 9: Numerical Analysis

Link: [Link](#)

Meeting ID:882 0345 5234 Passcode: 676545

Session Chair: **Natarajan E**, IIST, Thiruvananthapuram, India.Co-chair: **Pradeep Kumar Saroj**, VIT, Vellore.

Moderator: Sowmiya C.

Paper ID	Author	Title	Category
8	P K Parida	Recurrence relations for convergence analysis of a family of Chebyshev-type methods	Numerical Analysis
11	<b>Subhashree Patel</b> , Bijaya Laxmi Panigrahi, Gnaneshwar Nelakanti	Numerical solution of the Fredholm integral equations of the first kind by using multi-projection methods	Numerical Analysis
18	Abhimanyu Kumar, <b>Soni Kumari</b>	Local convergence of a family of Kurchatov like methods for nonlinear equations	Numerical Analysis
71	Lingaraj Angadi	Wavelet based Lifting schemes for the Numerical solution of Burgers-Fisher equations	Numerical Analysis
73	<b>Saurabh Tomar</b> , Kuppalapalle Vajravelu	An effective scheme for solving second-order two-point boundary value problems	Numerical Analysis
94	<b>M. M. Ayub Hossain</b> , B M Ikramul Haque	An Analytic Solution for the Helmholtz-Duffing Oscillator by Modified Mickens' Extended Iteration Procedure	Numerical Analysis
103	Kalyanrao Takale, <b>Veena Sangvikar</b>	Crank Nicolson Finite Difference Scheme for Time-Space Fractional Diffusion Equation	Numerical Analysis
113	<b>Naveen Chandra Bhagat</b> , Pradip Kumar Parida	Gauss-Newton-Kurchatov method for the solution of non-linear least square problem using omega condition	Numerical Analysis
170	P K Parida and <b>Shwet Nisha</b>	An Exponential Bisection Newton-like method of third order for enclosing simple roots of nonlinear equations	Numerical Analysis

Date: 07-01-2022

Time: 04.00 p.m.-06.00 p.m.

Paper Presentation Session 10: **Operational Research, Dynamical Systems & Solid****Mechanics**Link: [Link](#)

Meeting ID: 862 0775 5755 Passcode: 057664

Session Chair: **Mahesha Narayana**, UWI, Jamaica.Co-chair: **Padigepati Naveen**, VIT, Vellore.

Moderator: Anjali.

Paper ID	Author	Title	Category
28	<b>Anushree Samanta</b>	Water wave scattering by a wide rectangular impediment with a vent placed under a finite depth water body with ice covered surface	Solid Mechanics
30	Pankaj Kumar, <b>Dipesh</b>	Sensitivity and Directional analysis of two mutually Competing Plant Population under Allelopathy Using DDE	Dynamical System
88	<b>Berhanu Belay</b> , Adane Abebaw	Optimizing Multi-Objective Chance Constraint Quadratic Fractional Programming Problem	Operational Research
89	Fawziah M. Al-Saar, Kirtiwant P. Ghadle	Some analytical methods for solving Volterra's population growth model	Dynamical System
147	<b>Sony Khatri</b> and Ashish Prasad	Higher Order Fractional Variational Symmetric Duality over Cone Constraints	Operational Research
209	<b>Nibedita Ghosh</b> and Hari Shankar Mahato	Pore Scale analysis and homogenization of a diffusion-reaction-dissolution-precipitation model	Dynamical System
214	<b>Sudhakar Matle</b>	Finite point set model for open rectangular waveguide with open source	Solid Mechanics
247	Sony Khatri and <b>Ashish Prasad</b>	Higher Order Variational Symmetric Duality Over Cone Constraint	Operational Research
249	<b>Gopal Kumar Gupta</b> and Medha Kumari	Analysis of $M^X/G_{\{n,r\}}^{\{a,Y\}}/1/N$ queue with state dependent service and state dependent vacation (single vacation and multiple vacation)	Operational Research



Date: 07-01-2022

Time: 04.00 p.m.- 06.00 p.m.

Paper Presentation Session 11: CFD

Link: [Link](#)

Meeting ID: 828 7763 7946 Passcode: 444909

Session Chair: **S Srinivas**, VIT AP, India.Co-chair: **A. Subramanyam Reddy**, VIT, Vellore.

Moderator: Padmaja K.

Paper ID	Author	Title	Category
67	<b>Sravanthi C S</b>	Combined Effects Of Inclined Magnetic Field, Radiation And Heat Source/Sink On Mos_2-Zno/ Engine Oil Williamson Hybrid Nanofluid Past A Stretching Sheet	CFD
232	<b>P Tamizharasi</b> , R Vijayaragavan and A Magesh	Peristaltic Motion Of Non-Newtonian Fluid In A Curved Channel Under The Impact Of Induced Magnetic Field	CFD
242	Krishna Chavaraddi, <b>Priya Gouder</b> , Praveen Chandaragi and G B Marali Singh	Impact of magnetic field on Instability of type Rayleigh-Taylor at the Interface between two Superposed Couple-Stress Casson Fluids	CFD
280	<b>Poli Chandra Reddy</b> , Mummadisetty Umamaheswar, Singamala Harinath Reddy, Konduru Venkateswara Raju and Malaraju Chengal Raju	Analysis Of MHD Nanofluid In A Rotating System Under The Existence Of Heat Absorption	CFD
282	<b>Dr K V B Rajakumar</b> , Dr. K. S. Balamurugan and Dr. T. Govinda Rao	Influence of Hall and Ion-slip current on nonlinear MHD free convective flow near a vertical porous plate in presence of chemical reaction and Dufour effect.	CFD
286	<b>Mummadisetty Umamaheswar</b> , Poli Chandra Reddy, Singamala Harinath Reddy, M. C. Raju and S. V. K. Varma	Parabolic flow of MHD past an upright porous plate under variable temperature and concentration	CFD
319	<b>Revathi devi M</b> , Narsu sivakumar, Rushi kumar B	The influence of Heat source and Thermal Radiation on nano – Bioconvection Containing Gyrotactic Microorganism flow in a Parallel channel	CFD
322	<b>Anjali Srivastava</b> , Dr. Rishab Richard Hanvey	A Study On The Effect Of Inclination Of Magnetic Field On The Flow Of Fluid	CFD

		Through Parallel Plate Channel	
335	<b>Deepak Kumar,</b> Bhanuman Barman	The electroosmotic and ion transport phenomena of a pH-controlled soft nanochannel filled with power law fluid	CFD
336	<b>Palle Kiran</b>	Effect of modulation on nonlinear thermal convection with rigid boundary conditions	CFD

Date: 07-01-2022

Time: 04.00 p.m.-06.00 p.m.

Paper Presentation Session **12: Mathematical Analysis**

Link: [Link](#)

Meeting ID: 861 3070 7788 Passcode: 895338

Session Chair: **Sanjeev Singh**, IIT, Indore, India.

Co-chair: **Vijayakumar V**, VIT, Vellore.

Moderator: Gomathy G.

Paper ID	Author	Title	Category
51	<b>Sachin Magar</b> , Amol Khandagale and Kirtiwant Ghadle	On Generalized Atangana-Baleanu Derivative and its Applications	Differential Calculus
54	<b>Renukadevi Dyavanal</b> and Madhura Mathai	Uniqueness of power of a function sharing with its linear polynomial of difference operator	Complex Analysis
60	Latha Maheswari M and <b>Pandiyan K</b>	Positive Solutions to Fractional Integrodifferential Boundary Value Problems At Resonance	Fractional Calculus
65	<b>Priyanka Sehrawat</b> and Jitendra Kumar	What is the use of sensitivity analysis in mathematical modelling?	Mathematical Analysis
72	<b>Sathish S</b> and Khadar Babu Sk	Forecasting approach on COVID-19 Pandemic of present scenario in India	Dynamical System
84	<b>Momonari Kudo</b> and Shushi Harashita	Genus-five hyperelliptic or trigonal curves with many rational points in characteristic three	Algebraic Geometry
320	<b>Ujjawala Singh</b> and Tanuj Kumar	Product of linear canonical pseudo- differential operators	Differential Calculus
324	<b>Kavitha S</b> , Kaspar S.	Wiener domination index of graphs	Graph Theory

Date: 07-01-2022

Time: 04.00 p.m.-06.00 p.m.

Paper Presentation Session **13: Operational Research, Analysis, Integral Equations**

Link: [Link](#)

Meeting ID: 845 1273 5882 Passcode: 264116

Session Chair: **G Murugusundaramoorthy**, VIT, Vellore, India.

Co-chair: **K. Jagadeshkumar**, VIT, Vellore.

Moderator: Rajkumar R

Paper ID	Author	Title	Category
22	<b>Shalini Gupta</b> and Ashwini Kumar	Construction of Almost self-dual basis from Self-dual basis of $F_p^n$	Functional Analysis
36	<b>S. V. Babar</b> and S. G. Latpate	On Generalizations of Integral Inequalities and Its Applications	Integral Equation
64	<b>Jyotirmoy Mouley</b> , M.M. Panja and B.N. Mandal	Wavelet based approximation scheme for Cauchy type integro-differential equation arising in mathematical physics	Integral Equation
169	<b>Jyoti Saikia</b> and C.P. Pandey	q-Bessel Operator on Half Line and Continuous Wavelet Transform	Integral Transforms
318	<b>Vishal Nikam</b> , A. K. Shukla, Dhananjay Gopal.	Some New contraction mappings and application to the solvability of functional integral equation.	Integral Equations
325	<b>Indhumathi S</b> , Kaspar S	Non-negative Matrix Factorization approach for Transportation problem	Operational Research
327	<b>Manigandan K</b>	An M/G/1 retrial queue with three phase service under modified bernoulli vacation	Operational Research
328	<b>Sasikala P</b>	Characterization of Generalized Hausdorff operator on the Euclidean spaces	Analysis
330	Ramdayal Singh Kushwaha and <b>Renu</b>	Scalar flag curvature with an infinite series ( $\alpha;\beta$ )-metric	Analysis

Paper ID	Author	Title	Category
119	<b>Loganayagi V</b> , Kameswara Kameswaran Peri	Effects of Mixed Convection and Radiation on Ferro Fluid flow over an Inclined Plate	CFD
179	<b>Nitu Lakhmara</b> and Hari Shankar Mahato	Homogenization of a strongly coupled incompressible Stokes-Cahn-Hilliard system modeling two-phase mixture in a porous medium	CFD
186	<b>Vijayakumar R</b> and Nirmala P. Ratchagar	Generalised dispersion in a synovial fluids on nutritional transport with combined impact of electric and magnetic field	CFD
199	<b>Gomathy G.</b> and B R Kumar	Heat and Mass Transfer in a Thin Liquid Film over an Unsteady Stretching Sheet with Magnetic Field and Thermal Radiation	CFD
200	<b>Sowmiya C</b> and B R Kumar	MHD Mixed Convection Flow in a Permeable Vertical Plate with Buoyancy and Dufour Effects	CFD
201	<b>Padmaja K</b> and B R Kumar	Higher Order Chemical Reaction effects on MHD Nanofluid flow with Viscous Dissipation	CFD
208	<b>Madhupada Nagavalli</b> , T Ling Raju and Peri Kameswara Kameswaran	Two layered-fluid flow of ionized gases in a channel between two parallel porous plates under applied magnetic field with Hall Effect	CFD
298	Indira Ramarao, <b>Priyanka N Basavaraju</b> and Jagadeesha S	Effect of Heat Transfer on Peristaltic Transport of Prandtl Fluid in an Inclined Porous Channel	CFD

Date: 08-01-2022

Time: 11.00 a.m.-01.00 p.m.

Paper Presentation Session **15: Computing**

Link: [Link](#)

Meeting ID: 850 3598 8578 Passcode: 816041

Session Chair: **Biswapati Jana**, *Vidyasagar University, India.*

Co-chair: **Udhayakumar R**, *VIT, Vellore.*

Moderator: Rajkumar R

Paper ID	Author	Title	Category
190	<b>John Christopher Clement</b> , Shakrajit Sahu and Evelyn Ezhilarasi	Model Selection for Gaussian Process Using Regression Algorithms	Computing
233	<b>Mohd Shaliyar</b> and Khurram Mustafa	Metadata analysis of web images for source Authentication in online social media	Computing
244	<b>Anjali Anjali</b> ,B R Kumar and Jitendra Kumar	Modelling Suicide Incidences in Tamil Nadu: An Inferential Approach	Computing
252	<b>Ngarenon Togdé</b> and Augustin P. Sarr	A Computational Diffie--Hellman based Insider Secure Signcryption with Non Interactive Non Repudiation	Computing
255	Aman Bahuguna, Deepak Yadav, <b>Apurbalal Senapati</b> and Baidya Nath Saha	KNN-SVM with Deep Features for COVID-19 Pneumonia Detection from Chest-Xray	Computing
271	Jaideep Mulherkar, <b>Rishikant Rajdeepak</b> and Sunitha Vadivelmurugan	Quantum simulation of perfect state transfer on weighted cubelike graphs	Computing
292	<b>Souvik Sur</b> and Dipanwita Roy Chowdhury	Quadratically Sound Proof of Sequential Work	Computing

Date: 08-01-2022

Time: 11.00 a.m.-01.00 p.m.

Paper Presentation Session **16: Operational Research**

Link: [Link](#)

Meeting ID: 824 6486 1781 Passcode: 467452

Session Chair: **Karthikeyan K**, VIT, India.

Co-chair: **Ashish Kumar Prasad**, VIT, Vellore.

Moderator: Rajamani S.

Paper ID	Author	Title	Category
23	<b>Gagan Kumar Tamrakar</b> and Anuradha Banerjee	Steady-state analysis of $M/G_r^{(1,b)}/1$ queue with multiple working vacation	Operational Research
34	<b>Dr. Thangaraj M</b> , Dr. Rajendran P and Dr. Niranjana S.P	Optimization of Make Span in Jobs and Machines Involving Different Types of Processing Time with Weights of Jobs and Breakdown Machine Time	Operational Research
59	<b>C. Revathi</b> , L. Francis Raj and M. C. Saravananarajan	An $MX/G/1$ retrial G-queue with multiple vacations	Operational Research
66	<b>Subhendu Ruidas</b> , Mijanur Rahaman Seikh and Prasun Kumar Nayak	Pricing Policy in a Production Inventory Model with Interval-valued Carbon Emission Rates under Cap-and-trade Mechanism	Operational Research
79	<b>Indhumathi J</b> , Muthu Ganapathi Subramanian A and Gopal Sekar	Computational Approach For Transient Behaviour Of Finite Source Retrial Queueing Model With Delayed Multiple Vacations	Operational Research
182	<b>Ashok Bhadane</b> , Shrinath Manjarekar, Parashuram Ahire and Vasant Nikam	An alternative Method towards Assignment Problem	Operational Research
297	Kalaiarasi K, Shirprakash Tvg and <b>Sindhuja N</b>	EOQ Inventory Profit With Mathematical Model	Operational Research
301	<b>Nagarajan P</b> and Kalayanaraman R	$M^X/G^{(1,k)}/1$ queue with unreliable server and with Bernoulli vacation	Operational Research

Paper ID	Author	Title	Category
146	<b>Rachna Rachna</b> Navalakhe and Harsha Atre	Design and Development of Fuzzy Logic based Expert System for Prediction of Stages of Lungs Cancer	Fuzzy Logic
177	<b>Md Fazlay Akkash</b> and Swapan Raha	A Study on Fuzzy Soft Set with Similarity	Fuzzy Logic
309	<b>V.Kuppulakshmi, C.</b> Sugapriya and Kathirvel Jeganathan	A fuzzy approach for fish ban period based on verhulst's demand inventory model	Fuzzy Logic
326	<b>T.K.Buvaneshwari,</b> D. Anuradha	Fuzzy Transportation Problem with Additional Constraint in different Environments	Fuzzy Logic
329	<b>Dharmalingam M,</b> and G.S. Mahapatra	Multi-Criteria Decision Making Technique-TOPSIS for selecting vehicle using a Generalized interval type-2 Trapezoidal fuzzy number	Fuzzy Logic
332	K. Kalaiarasi and <b>M.Pushpalatha</b>	EOQ Inventory Model for Maximizing Profit of Informational Short Food Supply Chain Using a Fuzzy Inventory Model	Fuzzy Logic
333	K. Kalaiarasi and <b>A.Sivagama sundari</b>	Sustainable Medical Supply Chain Network During Pandemic By Using Fuzzy Inventory	Fuzzy Logic
334	K. Kalaiarasi and <b>A.Sowimya</b> <b>Catherine</b>	A Green Logistics Solution For Last Mile Deliveries Considering E-Vans And E-Cars-Bike Using Fuzzy Inventory	Fuzzy Logic