



Programme Schedule

DAY - 1 (Thursday January 4, 2018)

09:00-9:30	Registration	Venue:	A-Block
09:30-10:30	Inaugural Ceremony	Venue:	Raman Sabhagar
10:30-11:00	High - Tea	Venue:	Block D-107

Talk Session - 1

Timings	Talk	Speaker / Talk Topic	Session Chair	Venue
11:00-11:45	Talk-1	Prof. Dr. David Gao, Federation University of Australia ----- (PS) (Breakthrough Theory for Modelling Multi-Scale Complex Systems and Identifying Chaos and NP-Hardness with Analytical Solution to Knapsack Problems)		V1 - (Raman Sabhagar)
11:45-12:15	Talk-2	Prof. Dr. Yaroslav D. Sergeyev, Università Della Calabria, Via P. Bucci,Cubo, Rende (CS), Italy ----- (KS) (The Infinity Computer and numerical computations with infinities and infinitesimals)	Prof. Dr. Andreas Fischer	
12:15-12:45	Talk-3	Prof. Dr. Dietmar Hömberg TU Berlin Germany ----- (KS) (Mathematical Challenges in Steel Manufacturing)		

Paper Presentation - 1

Timings	Paper No.	Paper Title	Name of Author/Co-Author	Session Chair	Venue
4th Jan, 2018 12:45-13:30	Paper-1	Model Modeling of Wave Induced Oscillations in Pohang New Harbor by using Hybrid Finite Element Model	Prashant Kumar ¹ ,Rupali Gupta ² and Rajni ³	Prof. Dr. Manuel Torrilhon	V1 - (Raman Sabhagar)
	Paper-2	Study of the effect of rotational speed Modulation in Rayleigh Benard Convection in a Couple Stress Fluid Layer with Non Classical Heat Conduction Law	Maria Thomas ¹ and Sangeetha George K ²		
	Paper-3	Numerical Modeling of Ion-Size Effect on Electroosmotic Flow in Nanochannels	Rajni ¹ and Prashant Kumar ²		
	Paper-4	Numerical modelling of corrosion phenomenon in Magnesium alloy AZ91 in simulated body fluids	R. Vaira Vignesh ¹ and R. Padmanaban ²	Prof. Dr. S.B. Singh	V2 - Conference Hall,CSE
	Paper-5	A delayed SIR epidemic model along with Beddington – DeAngelis type incidence rate and Holling type II treatment rate	Kanica Goel ¹ , Abhishek Kumar ² and Nilam ³		
	Paper-6	Stability Analysis of Fractional Order Population Model with Carrying Capacity and approximate analytical solution by Homotopy Perturbation Transform Method	Ved Prakash Dubey ¹ , Rajnesh Kumar ²		

Timings	Paper No.	Paper Title	Name of Author/Co-Author	Session Chair	Venue
4th Jan, 2018 12:45-13:30	Paper-7	Approximate Controllability of Nonlocal Impulsive Stochastic Differential Equations with Delay	Surendra Kumar	Prof. Dr. Tanweer Jalal	V3 - Conference Hall, CE
	Paper-8	Fixed points for (ϕ, ψ) -contractions in Menger probabilistic metric spaces	Vandana Tiwari ¹ and Tanmoy Som ²		
	Paper-9	Ulam Stability of Linear Differential Equation of Second Order	R. Murali ¹ and A. Ponmana Selvan ²		
	Paper-10	Improved Method of Image Steganography using Modified LSB Technique	Nikhil Katiyar ¹ , Nikhil Kumar ² , and Arun Kumar Yadav ³	Prof. Dr. S.K. Pandey	V4 - Conference Hall, IT
	Paper-11	Outcome of wall features on the creeping Sinusoidal flow of MHD couple stress fluid in an inclined channel with chemical reaction	Mallinath Dhange ¹ and Gurunath Sankad ²		
	Paper-12	Similarity Solution of Hydromagnetic Flow near Stagnation Point over a Stretching Surface Subjected to Newtonian Heating and Convective Condition	KM Kanika ¹ , Chaudhary Santosh ² and Choudhary Mohan Kumar ³		
13:30-14:30	Lunch Break				Block D-107
Talk Session - 2					
Timings	Talk	Speaker / Talk Topic		Session Chair	
14:30-15:00	Talk-4	Prof. Dr. Andreas Fischer Department of Mathematics TU Dresden Germany (The Minimum Connectivity Inference Problem and Solution Approaches)	----- (KS)	Prof. Dr. Mark Ainsworth	V1 - (Raman Sabhagar)
15:00-15:30	Talk-5	Prof. Dr. S K Pandey Department of Applied Mathematics IIT BHU Varanasi INDIA (Variation of Pressure from Cervical to Distal end of Oesophagus during Swallowing: Study of a Mathematical Model)		Prof. Dr. Soonsik Kwon	
15:30-16:00	Talk-6	Prof. Dr. Samares Pal, University of Kalyani, Kalyani 741235, India (Mathematical modeling of macroalgal allelopathy in the emergence of coral diseases)			
16:00-16:30	Talk-7	Prof. Dr. Mikhail M. Lavrentiev Novosibirsk State University Russia (Modern Parallel Architectures to Speed Up Numerical Simulation)			
16:30-16:45	Tea Break				Block D-107
Paper Presentation - 2					
Timings	Paper No.	Paper Title	Name of Author/Co-Author	Session Chair	Venue
4th Jan, 2018 16:45-17:30	Paper-13	Three Dimensional Biomagnetic Flow and Heat Transfer over a Stretching Surface with Variable Fluid Properties	Md. Gulam Murtaza ¹ , M. Ferdows ² and E.E. Tzirtzilakis ³	Prof. Dr. Jichun Li	V1 - (Raman Sabhagar)
	Paper-14	Mean Field Magnetohydrodynamic Dynamo in Partially Ionized Plasma: Nonlinear, Numerical Results	Kunwar Alkendra Pratap Singh		
	Paper-15	Appoximate and Analytic Solutions of Some Nonlinear Diffusive Equations	Amitha Manmohan Rao ¹ and Arundhati Suresh Warke ²		

Timings	Paper No.	Paper Title	Name of Author/Co-Author	Session Chair	Venue
4th Jan, 2018 16:45-17:30	Paper-16	Combination Cynchronization of Fractional Order Chaotic Systems via Active Control	Aysha Ibraheem	Prof. Dr. Tzon-Tzer Lu	V2 - Conference Hall,CSE
	Paper-17	Recurrent Neural Network Model for Bidirectional Associative Memory	Neeraj Sahu ¹ and Poonam Sinha ²		
	Paper-18	Role of Spatial Correlations on the Onset of Nuclear Vaporization in ¹⁶ O+ ⁸⁰ Br reaction	Samiksha Sood ¹ , Rohit Kumar ² , Arun Sharma ³ and Rajeev K. Puri ⁴		
	Paper-19	Parallel Algorithms for Low Rank Tensor Arithmetic	Christian Löbber and Lars Grasedyck	Prof. Dr. Gintautas Dzemyda	V3 - Conference Hall, CE
	Paper-20	MTSF and Availability of a System with Chances of Wrong Detection of Fault and Three Opinions on Failure	Anil Kumar Taneja		
	Paper-21	Theoretical and experimental investigation on structural stability, electronic and vibrational properties of Polyaniline (PANI)	Rakesh K. Sonker ¹ , R.K. Shastri ² and B.C. Yadav ³		
	Paper-22	The approximate solution of higher-order of fractional differential equations using collocation method based on Chebyshev polynomials of third kind	Vijay Saw ¹ , Sushil Kumar ²	Prof. Dr. Antonio Cicone	V4 - Conference Hall, IT
	Paper-23	Non-polynomial quartic spline method for solving twelfth order boundary value problems	Arshad Khan ¹ and Shahna ²		
Paper-24	The Existence of Weak Solutions to the Continuous Aggregation and Collision-Induced Breakage Equation	Prasanta Kumar Barik ¹ and Ankik Kumar Giri ²			

DAY - 2 (Friday January 5, 2018)

Talk Session - 3

Timings	Talk	Speaker / Talk Topic	Session Chair	Venue
09:30-10:00	Talk-8	Prof. Dr. Gintautas Dzemyda, Institute of Mathematics & Informatics Vilnius University, Lithuania --- (KS) (Visualization of Data: Methods, Software and Applications)	Prof. Dr. L.M. Patnaik	V1 - (Raman Sabhagar)
10:00-10:30	Talk-9	Prof. Dr. Michael M. Resch University of Stuttgart Nobelstr Germany ----- (KS) (High Performance Computing Challenges and Risks for the Future)		
10:30-11:00	Talk-10	Prof. Dr. S. Majid Hassanizadeh, Utrecht University; Department of Earth Sciences, Netherland ----(KS) (Dynamic Pore-network Models Development)	Prof. Dr. Hiromichi ITOU	
11:00-11:15	Tea Break			Block D-107

Talk Session - 4

Timings	Talk	Speaker / Talk Topic	Session Chair	
11:15-11:45	Talk-11	Prof. Dr. Jichun Li, University of Nevada Las Vegas USA (Recent Advances on Mathematical Analysis and Simulation of Invisibility Cloaks with Metamaterial)	Prof. Dr. Mikhail M. Lavrentiev	V1 - (Raman Sabhagar)
11:45-12:15	Talk-12	Prof. Dr. Lars Grasedyck, RWTH AACHEN University, Germany (High Performance Computing with Hierarchical Low Rank Tensor Representations: Sublinear complexity)		
12:15-12:45	Talk-13	Prof. Dr. Pedro Lima, IST LISBA, PORTAGAL (Effective Numerical Methods for the Two-Dimensional Neural Field Equations)		
12:45-13:15	Talk-14	Prof. Dr. L M Patnaik , Indian Institute of Science, Bangalore, INDIA ----- (KS) (HPC Technologies from Scientific Computing to Big Data Applications)	Prof. Dr. Michael M. Resch	
13:15-13:45	Talk-15	Prof. Dr. Mark Ainsworth, Brown University, Providence RI.USA ----- (KS) (Multigrid at Scale?)		
13:45-14:30	Lunch Break			Block D-107

Talk Session - 5

Timings	Talk	Speaker / Talk Topic	Session Chair	
14:30-15:00	Talk-16	Prof. Dr. Gabriel Wittum, Geothe University Germany ----- (KS) (Parallel Adaptive and Robust Multigrid)	Prof. Dr. Dietmar Hoemberg	V1 - (Raman Sabhagar)
15:00-15:30	Talk-17	Prof. Dr. Antonio Cicone, University of L'Aquila, Italy ----- (KS) (Non-stationary and non-linear signals: a new promising tool for their analysis)		
15:30-16:00	Talk-18	Prof. Dr. Tzon-Tzer Lu, National Sun Yat-sen University, Taiwan, R.O.C (Super-geometric Convergence of Numerical Methods for Differential Equations)	Prof. Dr. Jichun Li	
16:00-16:30	Talk-19	Prof. Dr. Hiromichi ITOU, Tokyo University of Science, Tokyo, Japan (Contacting crack faces within the context of nonlinear elastic bodies exhibiting limiting strain)		
16:30-16:45	Tea Break			

Paper Presentation - 3

Timings	Paper No.	Paper Title	Name of Author/Co-Author	Session Chair	Venue
5th Jan, 2018 16:45 - 17:30	Paper-25	A Deterministic Inventory Model for Time-Varying Demand and Holding Cost with Partial Backlogging	Dharamender Singh ¹ and Bani Mukherjee ²	Prof. Dr. Rakesh Dubey	V1 - (Raman Sabhagar)
	Paper-26	A Comprehensive Cogitation of Optimal Power Flow in Power System Planning	Sonal Sapra ¹ , J.P. Navani ² , and T.N Shukla ³		
	Paper-27	Self-Dual Codes over the Ring $F_{2m} + uF_{2m} + vF_{2m} + uvF_{2m}$	Ankur		

Timings	Paper No.	Paper Title	Name of Author/Co-Author	Session Chair	Venue
5th Jan, 2018 16:45 - 17:30	Paper-28	SIR Model of Social Network in Web forum- a Review	Pooja Khurana ¹ and Deepak Kumar ²	Prof. Dr. S.B. Singh	V2 - Conference Hall,CSE
	Paper-29	Modelling, Analyzing & Interpreting Reliability of the Probability of an Earthquake	Viresh Sharma ¹ and Divya Dhyani ²		
	Paper-30	C- α -(l)-compact spaces	Monika Gaur ¹ and M.K.Gupta ²		
	Paper-31	Buckling Behaviour of Single Walled Short Carbon Nanotubes	Parul Tiwari	Prof. Dr. Antonio Cicone	V3 - Conference Hall, CE
	Paper-32	Linear and Nonlinear double diffusive convection in a couple stress fluid saturated anisotropic porous layer with Soret effect and internal heat source	B.S. Bhadauria ¹ and Kanchan Shakya ²		
	Paper-33	A Review of Some Generalized Principal Component Anaysis(PCA) Based Machine Learning Techniques	Leena Chawla ¹ , Arti Saxena ² and Vijay Kumar ³		
	Paper-34	Mathematical Analysis of Retinal Oxygenation	Aadesh Kumar ¹ , Dr. Ram Autar ² , and Dr. Deepti Seth ³		
	Paper-35	Analyse the improvement of Artificial Neural Network by The Modified Transfer Function	Kshitij Tripathi ¹ , Rajendra G. Vyas ² , and Anil K. Gupta ³	Prof. Dr. Samares Pal	V4 - Conference Hall, IT
Paper-36	Dimension reduction and classification in ECG signal interpretation using FA & PCA: A Comparison	Varun Gupta ¹ and Monika Mittal ²			

DAY - 3 (Saturday January 6, 2018)

Talk Session - 6

Timings	Talk	Speaker / Talk Topic	Session Chair	Venue
09:30-10:00	Talk-20	Prof. Dr. Jun Zou Dept of Mathematics, The Chinese University of Hong Kong , Hong Kong ----- (KS) (Effective Preconditioners for Various Maxwell Systems)	Prof. Dr. Andreas Fischer	V1 - (Raman Sabhagar)
10:00-10:30	Talk-21	Prof. Dr. Govindan Rangrajan, Indian Institute of Science Bangalore, India ----- (KS) (Sparse Vector Autoregressive Representations of High-Dimensional Time Series)		
10:30-11:00	Talk-22	Prof. Dr. Vishnu Dutt Sharma, FNASc, FNA, IIT Bombay, India ----- (KS) (Quasi-linear hyperbolic conservation laws and associated wave phenomena)		
11:00-11:15	Tea Break			Block D-107

Talk Session - 7

Timings	Talk	Speaker / Talk Topic	Session Chair	Venue
11:15-11:45	Talk-23	Prof. Dr. Vijay Gupta, NSIT, New Delhi (Advances in Approximation by Certain Operators)	Prof. Dr. Vishnu Dutt Sharma	V1 - (Raman Sabhagar)
11:45-12:15	Talk-24	Prof. Dr. Yifeng Xu, Shanghai Normal University, China (An Adaptive Finite Element Method for Cathodic Protection)		

Timings	Talk	Speaker / Talk Topic	Session Chair	Venue	
12:15-12:45	Talk-25	Prof. Dr. Manuel Torrilhon, RWTH Aachen University, Germany (Hierarchical Boltzmann simulations and m(odell)-refinement)	Prof. Dr. Govindan Rangrajan	V1 - (Raman Sabhagar)	
12:45-13:15	Talk-26	Prof. Dr. Soonsik Kwon, Korea Advanced Institute of Science and Technology(KAIST), Korea (Infinite Iteration of Normal Form Reduction for Nonlinear Dispersive Equations)			
13:15-14:00	Lunch Break			Block D-107	
Paper Presentation - 3					
Timings	Paper No.	Paper Title	Name of Author/Co-Author	Session Chair	Venue
6th Jan, 2018 14:00-14:45	Paper-37	Magnetic Fluid Lubrication of Rough Thrust Bearings considering a Sine Film Profile	Snehal Shukla ¹ and Gunamani Deheri ²	Prof. Dr. Lars Grasedyck	V1 - (Raman Sabhagar)
	Paper-38	Effects of Slip on the Peristaltic Motion of a Jeffrey Fluid in Porous Medium with Wall Effects	G. C. Sankad ¹ , Pratima. S. Nagathan ²		
	Paper-39	Modeling the socio-economic waste generation factors: A case study of Faridabad (Haryana State, India)	Ajay Satija ¹ , Dipti Singh ² , and Vinai K. Singh ³		
	Paper-40	Applied Symmetrical Principle to Solve Schwarz-Christoffel Parameter Problem	Mei Yuan ¹ , Huiqing Peng ² and Yun Lei ³	Prof. Dr. Rohit Puri	V2 - Conference Hall, CSE
	Paper-41	Mean-square stability of two classes of theta Milstein methods for nonlinear stochastic differential equations	Mahmoud A. Eissa		
	Paper-42	Complex Event Processing Application for Efficacious Algorithm Trading in Capital Market: Design and Development	Suchit Agrawal	Prof. Dr. S.U. Siddiqui	V3 - Conference Hall, CE
	Paper-43	Regularization of highly ill-conditioned RBF asymmetric Collocation systems in fractional models	Prashanthi K S ¹ and Chandhini G ²		
	Paper-44	On the different clusterization algorithms and role of cross-sections in forming Complex multi bound structures using Monte-carlo simulations	Rohit Kumar ¹ and Ishita Puri ²		
	Paper-45	On I-convergent double sequence spaces defined by a compact Operator and a modulus function	Tanweer Jalal		
	Paper-46	Application of Quasi-f-Power Increasing Sequence in IC, α , γ ; δ_k Summability	Alka Munjal ¹ , and Smita Sonker ²	Prof. Dr. Tanweer Jalal	V4 - Conference Hall, IT
Paper-47	Fixed Point Results for Cyclic (α β)- Contraction in Fuzzy Metric Spaces	Vishal Gupta ¹ , Ashima Kanwar ² , Naveen Mani ³			
Paper-48	The proton whistler wave energization by high frequency kinetic Alfven wave: A numerical approach	Ravinder Goyal ¹ , R P Sharma ² , Nidhi Gaur ³ and D N Gupta ⁴			
14:45-15:30	Valedictory Ceremony			Raman Sabhagar	
15:30-15:45	High - Tea			Block D-107	