

<i>SECTION</i>		MATHEMATICAL SCIENCES (INCLUDING STATISTICS)
Sectional President		Prof. Nandadulal Bairagi , Centre for Mathematical Biology and Ecology, Department of Mathematics, Jadavpur University, Kolkata
Sectional Recorder		Prof. Anil Kumar Vashishth , Kurukshetra University, Kurukshetra, Haryana
Sectional Secretary		Dr. Vishal Sarin , Lovely Professional University, Jalandhar, Punjab
January 04, 2019		
14:00 – 17:30		
SECTIONAL COMMITTEE MEETING		
Venue	:	Block 14, Room-501 L
Presidential Address	:	Prof. Nandadulal Bairagi , Centre for Mathematical Biology and Ecology Department of Mathematics, Jadavpur University, Kolkata <i>Reproducing Psoriasis Phenotypes Through Mathematical Modelling of Immune Cells-- Keratinocytes Cross Talk</i>
Platinum Jubilee Lecture	:	Prof. Poonam Singh , University of Delhi , Delhi <i>Designs for Mixture Experiments through Projection</i>
Young Scientist Award Presentations	:	Radhika Thakur , Dr. Y.S. Parmar University of Horticulture and Forestry Nauni-Solar, Himachal Pradesh Debadatta Adak , Maharaja Bir Bikram University, P.O. Agartala College, Agartala, Tripura Sreeparna Majee , Jadavpur University, Kolkata Nadeem Ansari , Saifia Science College, Barkatullah University, Bhopal – Madhya Pradesh, Anil Negi , Indian Institute of Technology (I.S.M),

	Dhanbad
Foreign Scientist Invited Lecture	Prof. Gaston M. N'Guerekata , Morgan State University Baltimore, MD, USA <i>Almost periodically forced pendulum: sub and super solutions</i>
Foreign Scientist Invited Lecture	Prof. Yuri Vassilevski , Marchuk Institute of Numerical Mathematics RAS, Moscow Institute of Physics and Technology, Sechenov University, Moscow, Russia <i>Numerical simulation of incompressible flows in time-dependent domains</i>
17.00 – 17.30 SECTIONAL COMMITTEE ELECTION	

January 05, 2019	
14:00 – 18:00	
Venue	Block 14, Room-501 L
14.00 – 15.30 Symposium: Application of Mathematics to Physical Problems and Technological Developments	
Invited Lectures	Prof. Subenoy Chakraborty , Department of Mathematics, Jadavpur University, Kolkata <i>The mathematical story and technical issues of gravitational waves</i>
	Prof. Bhola Ishwar , Department of Mathematics, B.R.A. Bihar University, Muzaffarpur, Bihar <i>Stability of triangular equilibrium points in the Photogravitational elliptic restricted three body Problem with poynting-robertson drag</i>

	<p>Dr. M. Xavier James Raj, Head, Orbital Analytics Section (Rtd), Applied Mathematics Division, Vikram Sarabhai Space Centre, ISRO, Kerala</p> <p><i>Analytical methods for prefiltering of close approaches between space objects</i></p>
<p>Tea Break: 15.30 – 15.45</p>	
<p>15.45 – 18.00</p>	<p>Parallel Session – I</p> <p>Invited Lectures/ Oral Presentations – Applied Mathematics</p> <p>Block 14, Room-501 L</p>
<p>Invited Lecture</p>	<p>Prof. Rashmi Bhardwaj, University School of Basic and Applied Sciences, Non-Linear Dynamics Research Lab, Guru Gobind Singh Indraprastha University, Dwarka, Delhi</p> <p><i>Chaotic Simulations for Musculoskeletal Postures</i></p>
<p>Oral Presentations</p>	<p>A. Y. Shaikh, Department of Mathematics, Indira Gandhi Kala Mahavidyalaya, Ralegaon, Maharashtra</p> <p><i>Holographic Dark Energy Cosmological Models in Modified Theory of Gravity</i></p>
	<p>Avdhesh Kumar, Jaglal Chaudhary College, Chapra, Bihar</p> <p><i>Restricted relativistic elliptic three-body problem with triaxial rigid bodies and oblate primaries</i></p>
	<p>Baljeet Singh, Department of Mathematics, Post Graduate Government College, Chandigarh, Punjab</p> <p><i>Effects of rotation and magnetic field on energy ratios of reflected waves in a fibre-reinforced elastic material</i></p>
	<p>Jisha Varghese, Department of Statistics, St. Thomas College, Mahatma Gandhi University, Kottayam, Kerala 686 574, India</p> <p><i>Marshall-Olkin Log-Kumaraswamy Distribution: Applications and Generalization</i></p>
	<p>M. Tirumala Devi, Department of Mathematics Kakatiya University, Warangal, Telangana</p> <p><i>Estimating the Reliability for Cascade Model when</i></p>

	<i>Stress and Strength follow Rayleigh Distribution</i>
Oral Presentations	Mayura Mathankar , Govt. Vidarbha Institute of Science & Humanities, Amravati, Maharashtra <i>To find optimal solution by reducing the set of activities For heterogeneous resource allocation problem</i>
	Arpita Chatterjee , YMCA University of Science and Technology, Faridabad, Haryana <i>Dynamics of a deformed atom cavity field system in presence of a Kerr-like medium</i>
	P. Jyothi , Department of Statistics Univ.Arts & Science College (Autonomous), Kakatiya University Warangal, Telangana <i>Reliability Computation of System Reliability for the New Rayleigh Pareto Distribution</i>
	T. Sumathi Uma Maheswari , Department of Mathematics, Kakatiya University, Warangal Telangana <i>A study on Survival Analysis of Stress-Strength System in Case of Aging, Cyclic Damage and Cumulative Damage</i>
	Ganesh Mahto , L. N. M. U., Darbhanga, Bihar <i>Triangular libration points in elliptic photogravitational restricted three body problem with oblateness</i>
15.45 – 18.00 Parallel Session– II	
Invited Lectures/ Oral Presentations – Pure Mathematics	
Block 14, Room-402	
Invited Lecture	Prof. M. Majumdar (Tarafdar) , Department of Pure Mathematic, University of Calcutta, Kolkata <i>On pseudo-symmetric manifolds & its applications</i>
Oral Presentations	N. K. Agrawal , Department of Mathematics, Lalit Narayan Mithila University, Darbhanga, Bihar <i>Cr-submanifolds of a nearly lorentzian para sasakian manifold with semi symmetric semi metric connection</i>

	<p>Dr. Yogeesh N, Department of Mathematics Govt. First Grade College, Tumkur, Karnataka(INDIA)</p> <p><i>Solutions to the Cauchy-Euler's Differential Equation Of Second Order With Constant Co-Efficient Using FOOS (Free & Open Source Software)-Maxima</i></p>
	<p>Abhik Singh, Department of Mathematics, Patna University, Patna., Bihar</p> <p><i>Some new results on commutative algebra</i></p>
	<p>Jagdish A.Nanware, Department of Mathematics, Shrikrishna Mahavidyalaya, Gunjoti, Osmanabad, Maharashtra</p> <p><i>Periodic boundary value problem for system of Riemann-Liouville sequential fractional differential equations</i></p>
	<p>Javid Ali, Department of Mathematics, Aligarh Muslim University, Aligarh</p> <p><i>Stability and convergence results for zamfirescu multi- valued mappings</i></p>
<p>15.45 – 18.00 Parallel Session-III</p> <p>Invited Lectures/Oral Presentation – Fluid/Solid Mechanics</p> <p>Block 14, Room-404</p>	
<p>Invited Lecture</p>	<p>Prof. Rita Choudhury, Department of Mathematics, Gauhati University, Guwahati, Assam</p> <p><i>Ramifications of Elastico-Viscous Thermal Boundary- Layer Flow Around a Sphere</i></p>
	<p>Dr. Peeyush Tewari, Department of Mathematics, Birla Institute of Technology, UP</p>
<p>Oral Presentations</p>	<p>Pravangsu Sekhar Das, Department of M.Sc. Applied Mathematics, NSHM College of Mgmt. and Tech, Maulana Abul Kalam Azad University of Technolgy, Kolkata</p> <p><i>The unsteady flow of visco-elastic Maxwell fluid of second order due to a periodic pressure gradient through a rectangular duct</i></p>

	<p>Jagdish A. Nanware, Department of Mathematics Shrikrishna Mahavidyalaya, Gunjoti, Osmanabad, Maharashtra</p> <p><i>Solution of Partial Integro-Differential Equations using Sumudu Transform Method</i></p>
	<p>K. Somaiah, Department of Mathematics, Kakatiya University, Warangal, Telangana</p> <p><i>Studies of Rotation and Fluid effect on Radial Vibrations in a Micropolar Elastic Solid with a Fluid loaded Spherical Cavity</i></p>
	<p>Praveen Ailawalia, Department of Mathematics and Humanities, Maharishi Markandeshwar University, Sadopur-Ambala, Haryana</p> <p><i>Elastodynamic response in a temperature dependent thermoelastic half space with microtemperatures subjected to internal heat source</i></p>
	<p>Parveen Lata, Department of Basic and Applied Sciences, Punjabi University, Patiala, Punjab</p> <p><i>A study of wave propagation in anisotropic homogeneous layered thermoplastic medium</i></p>
	<p>Saurabh Radhakisan Shinde, New Arts, Commerce and Science College, Parner, Maharashtra</p> <p><i>Traffic Control and Management with Hierarchical Intelligent Vehicles</i></p>
15.00 – 17.30	Concurrent Poster Session –I
BEST POSTER AWARD PRESENTATION	

January 06, 2019		
14:00 – 18:00		
Venue		Block 14, Room-501 L
Time: 14.00 – 15.00 Symposium : Mathematical and Computational Modelling with Application to Biological Sciences and Medical Technology		
Invited Lectures		Prof. Joydev Chattopadhyay , Agricultural & Ecological Research Unit, ISI, Kolkata
		Dr. Samrat Chatterjee , Drug Discovery Research Center, Translational Health Science and Technology Institute (a DBT Institute), Faridabad <i>Studying host-pathogen interaction under the influence of Mycobacterium tuberculosis through mathematical models</i>
15.10 – 18.00 Parallel Session - I Invited Lectures/ Oral Presentations – Solid Mechanics Block 14, Room-501 L		
Invited Lectures		Prof. Malla Reddy Perati , Department of Mathematics, Kakatiya University, Warangal, Telangana <i>Effect of Static Stresses on Vibrations in Poroelastic Solids</i>
		Prof. Subhas Mondal , Department of Mathematics, Jadavpur University, Kolkata <i>Semi-infinite moving crack between two bounded dissimilar isotropic strip</i>
		Prof. Abhijit Lahiri , Department of Mathematics, Jadavpur University, Kolkata <i>A three dimensional thermoelastic half space with three phase lags using memory dependent derivative</i>

Oral Presentations	<p>A. Chandulal, Department of Mathematics, Rashtriyasanskrit Vidyapeetha, (Deemed to be University) Tirupati, Andrapradesh</p> <p><i>Dilatation and distrotional waves in micro-morphic medium</i></p>
	<p>Dr. Mira Choudhury, Department of Mathematics, N. N. Saikia College, Titabar, Assam</p> <p><i>Boundar layer analysis of a mhd fluid flow due to a point sink with variable thermo-physical properties in presence of heat generation</i></p>
	<p>B. Das, Department of Mathematics, Ramakrishna Mission Vidyamandira, Belur Math, Howrah, West Bengal</p> <p><i>Electro-Magneto-Thermoelastic Interactions Using Fractional Order Energy Equation</i></p>
	<p>Subrata Kr. Debnath, Department of Basic Science and Humanities, Meghnad Saha Institute of Technology, Kolkata</p> <p><i>Variation of rigidity with depth and stress/strain accumulation/release due to movement across a long vertical surface breaking strike-slip fault in an half-space model of the lithosphere-asthenosphere system</i></p>
	<p>Bhauasheb R. Sontakke, Department of Mathematics, Pratisthan Mahavidyalaya, Paithan, Maharashtra</p> <p><i>Stability and convergence of fractional parabolic partial Differential equation and its application</i></p>
	<p>D Grover, Department of Mathematics, Lovely Professional University, Phagwara, Jalandhar, Punjab</p> <p><i>Elasto-thermodiffusive body waves propagation in rotating semiconductor materials</i></p>

15.10 – 18.00

Parallel Session – II

Invited Lectures/Oral Presentation – Nonlinear Dynamics and Bio-Mathematics

Block 14, Room-402

Invited Lectures	<p>Prof. Syamal Kumar Dana, Department of Mathematics, Jadavpur University, Kolkata</p> <p><i>Sudden transition to large amplitude oscillations: Routes to Extreme events</i></p>
	<p>Prof. Prashant K Srivastava, Department of Mathematics, Indian Institute of Technology Patna, Patna, India</p> <p><i>Impact of information on treatment as well as on disease dynamics</i></p>
	<p>Dr. Indranil Mukhopadhyay, Indian Statistical Institute, Kolkata</p> <p><i>On time to extinction of HIV disease dynamics</i></p>
Oral Presentations	<p>Dipankar Sadhukhan, Department of Mathematics, Haldia Government College, Haldia, West Bengal</p> <p><i>Comparative Study of the deterministic and stochastic behaviour of a prey-predator model with Holling type IV response function</i></p>
	<p>Mamta Rani, Department of Computer Science, Central University of Rajasthan, Bandarsindari, Kishangarh, Dist – Ajmer, India</p> <p><i>The logistic map revisited</i></p>
	<p>R. P. Gupta, Institute of Science, Banaras Hindu University, Varanasi, Uttar Pradesh</p> <p><i>Period Doubling Routes to Chaos in a Predator-Prey-Scavenger Model with Harvesting</i></p>
	<p>Subhas Khajanchi, Department of Mathematics Presidency University, Kolkata</p> <p><i>Optimal treatment strategies using dendritic cell vaccination for a growing tumor: A mathematical perspective</i></p>
	<p>Anuj Kumar, Department of Mathematics, Jaypee Institute of Information Technology, Noida, Uttar Pradesh</p> <p><i>Nonlinear Dynamics of Infectious Diseases via Information-Induced Vaccination and Saturated Treatment</i></p>

	<p>Shreya Preety Kalra, Department of Mathematics, Lovely Professional University, Phagwara, Punjab</p> <p><i>Study of Combined Effects of Toxicant and Acidity on Survival of Aquatic Population: A Mathematical Model</i></p>
<p>15.10 – 18.00 Parallel Session – III</p> <p>Invited Lectures/Oral Presentation – Pure Mathematics</p> <p>Block 14, Room-404</p>	
Invited Lecture	<p>Prof. Arindam Bhattacharyya, Department of Mathematics, Jadavpur University Kolkata</p> <p><i>Ricci solitons on warped product spaces</i></p>
Oral Presentations	<p>A. Parthiban, Department of Mathematics, Lovely Professional University, Phagwara, Punjab</p> <p><i>On Prime Distance Labeling of Certain Classes of Graphs</i></p>
	<p>Amar Nath Kumar, Department of Mathematics, Deo Sharan Women's Evening College, Sohsarai, Biharsharif, Nalanda, Bihar</p> <p><i>Parametric Convergence implies Projective Convergence in the Dual space of a Function space</i></p>
	<p>Megha Goyal, Department of Mathematical Sciences, I. K. Gujral Punjab Technical University, Jalandhar, Punjab</p> <p><i>New partition theoretic interpretations of gollnitz-gordon identities</i></p>
	<p>L. N. Kotcherlakota, Narasimha Ashram, Maharani-peta, Visakhapatnam, Andhra Pradesh</p> <p><i>Cyclic and v_4 klein group analysis to describe varied mass terms</i></p>
	<p>S.C. Ghosh, Department of Mathematics, D. A.V. College, Kanpur, Uttar Pradesh</p> <p><i>Fixed Point Theorem on Pixel Metric Spaces</i></p>

	<p>S.Sriram, Mathematics Wing, Directorate of Distance Education, Annamalai University, Annamalai Nagar, Tamil Nadu</p> <p><i>Some Properties of Intuitionistic of Fuzzy Matrices</i></p>
	<p>Wajih Ashraf, Department of Mathematics, Aligarh Muslim University, Aligarh, Uttar Pradesh</p> <p><i>On epimorphically preserved heterotypical semigroup identities</i></p>
15.00 – 17.30	Concurrent Poster Session –II

January 07, 2019	
14.00 – 15.00	
Parallel Session – I	
Invited Lectures/ Oral Presentations – Mathematical Physics	
Block 14, Room-501 L	
Oral Presentations	<p>Upendra Prasad Singh, Science Teacher, M. S. Kochadhi Chausa, Buxar, Bihar</p> <p><i>The Einstein Universe and Experimental Tests of General Relativity</i></p>
	<p>Iftikar Hossain Sardar, Department of Mathematics, Prabhu Jagatbandhu College, Howrah, West Bengal</p> <p><i>Compact star model in Einstein Gauss-Bonnet Gravity within the framework of Finch Skea space time</i></p>
	<p>Hridaya Nand Sah, Department of Mathematics, Raja Singh College, Siwan, Bihar</p> <p><i>Review of Motion of the System in the Central Gravitational Field</i></p>
	<p>M. K. Shukla, Department of Mathematics Shia P.G College, Lucknow, Uttar Pradesh</p>

		<i>Propagation of characteristic wave front through a two-phase mixture of gas and dust particles</i>
14.00 – 15.00		
Parallel Session – II		
Invited Lectures/ Oral Presentations – Fluid /Solid Mechanics		
Block 14, Room-402		
Oral Presentations		Sangeeta Kumari , Department of Mathematics, Chandigarh University Gharuan, Mohali, Punjab <i>Effects of two-temperature on Rayleigh wave in generalized magneto-thermoelastic media with hydrostatic initial stress</i>
		Yajuindra Kumar , Government Girls Degree College Behat, Saharanpur, Uttar Pradesh <i>Differential quadrature analysis of the effect of variable foundation on free vibration of functionally graded annular plates</i>
		B. D. Dawkar , Department of Mathematics, Vivekanand Mahavidyalaya Aurangabad, Maharashtra <i>Finite system of fractional Differential equations with integral boundary conditions</i>
		Priyanka B. Gaikwad , P. N. College, Pusad, Yavatmal, Maharashtra <i>The exact study of transient heat conduction problem of non homogeneous circular plate</i>
14.00 – 15.00		
Parallel Session – III		
Invited Lectures/ Oral Presentations –Statistics		
Block 14, Room-404		
Oral Presentations		D. K. Ghosh , Dep. of Statistics, Saurashtra university, Rajkot, Gujarat <i>Study on Regression analysis and Analysis of variance techniques</i>
		R. Kalyanaraman , Department of Mathematics Annamalai University Annamalainagar, Tamil Nadu <i>Heterogeneous two server queue with unreliable, reliable servers and with working vacation</i>

	<p>P. Pandiyan, Department of Statistics, Annamalai University,Chidambaram, Tamil Nadu</p> <p><i>Estimating the survival time of cancer</i></p>
	<p>C. Subramanian, Department of Statistics, Annamalai University, Tamil Nadu</p> <p><i>On weighted akshaya distribution with applications in biomedical sciences and engineering</i></p>
	<p>N. Pukazhenthi, Department of Statistics, Annamalai University, Tamil Nadu</p> <p><i>Performance analysis of a $g/g/1$ discrete time bulk service queue with working vacations</i></p>
	<p>Shaka Aunali Amin, Department of Statistics, Annamalai University, Tamil Nadu</p> <p><i>Recent developments in control charts Techniques</i></p>
<p>General Discussion and Recommendations</p>	