Welcome to the

International Conference (Virtual Mode) on Emerging trends in Statistics and Data Science in conjunction with 40th Annual Convention of ISPS to be held during 07-10, September, 2021.

General Note: The Schedule gives the Session number, time slot, name of the chair, list of speakers with a code number of the Abstract in the parenthesis. By clicking that code one can access the corresponding Abstract.

All registered delegates will receive email notifications and the links for different sessions.

There are 4 parallel sessions with Sessions managed from four venues.

All timings are **Indian Standard Time (IST).**

Venue details and the online link are given in the Table below.

Sl. No.	Venue code	Venue	Contact Person and Phone	Online Conference link:
1.	**MCMP**	The Madura College	1) **Dr. Venkateswaran,** Phone: 9573360040. venky.swaran@gmail.com 2) **Dr. M. Hemanth Kumar** Phone: 9700410566	Online Platform: **Zoom**. https://us02web.zoom.us/j/85245891614?pwd=ZENpQy8xdUJCTjk4NkY3dG84aERoQT09 **Meeting ID**: 852 4589 1614 **Passcode**: 215425
2.	**KUP**	University of Kerala	**Dr. C. Satheesh Kumar** Phone : 9074108366 drcsatheesh001@gmail.com	**Google meet**: https://meet.google.com/nmg-jmyx-suh **YouTube**: https://youtube.com/playlist?list=PLj0HyNAoj7RAjQCvveLbJ4s7hgeMddDRLV
3.	**MDUP**	M D University	1) **Dr. S. C. Malik** Phone: 9813104668 sc_malik@rediffmail.com 2) **Dr. Naveen Nandal,** Phone: 9728378761	**Google meet**: https://meet.google.com/ves-iasv-urx **YouTube**: https://www.youtube.com/channel/UCLfHQQs-7e_GVOHjy_ 0YqlA
4.	**BUCP**	Bharathiar University	**Dr. V. Kaviyarasu,** Phone: 9597455452 kaviyarasu@buc.edu.in	**Google meet**: https://meet.google.com/dig-ivzw-zfy **YouTube**: rtmp://a.rtmp.youtube.com/live2

One may also contact: Dr. N. Balakrishna, Cochin University of Science and Technology, Phone: 9446605682.

Kind attention to the Session Chairs and the Speakers:

Time limits:

45 minutes for Keynote lecture (including question answer)

30 minutes for invited (25+5)

15 minutes for Contributory (12+3)

1. Please locate your Session and join using the link at least 5 minutes before the scheduled time.
2. Each session contains invited and contributory talks. An invited lecture is for 30 minutes and contributory talk is for 15 minutes including discussions. Please maintain the timings strictly. If there is a shortage of time due to some problem, the Chairperson is requested to adjust the session with the available time.
3. Please ensure to finish the session on time. The audience may post their questions in the chat box to clarify at the end.
4. Please note down the attendance of the speakers and intimate the venue leaders to issue e-certificate later.

General Instructions:

- We are giving below some tips that would help you have smooth sessions and enjoy the deliberations:
- The non-parallel sessions such as Inaugural function, Keynote lectures, etc. are managed from the room **MCMP**. The deliberations in this room will be done using **zoom** platform.
- The presentations in other rooms will be managed in google platform.
- The respective links are given in the above Table.

1. Please note that the sessions at venue **MCMP** is managed using **ZOOM** platform. The remaining three venues are managed with Google meet.
2. Please download the **latest versions** of **zoom** and **google meet** on your system.
3. Once you have signed in **zoom**, please use JOIN MEETING option to join using the id given in the above Table. Thereafter select JOIN WITH VIDEO and JOIN WITH COMPUTER AUDIO.
4. Click on the invitation link received in your email id to join **google meet**, so that there is no need for permission from the host. One can also use the link given in the above Table to join the google meet.
5. To **share your presentation via zoom**, at the bottom of the screen there is a link SHARE SCREEN (with a UP arrow image). Keep your presentation open before your turn and then share screen and your presentation appears on the screen. Take it on the full-page. You can make the presentation.
6. To **share your presentation via google meet**, at the bottom of the screen there is a link SHARE SCREEN (with a UP arrow image). Keep your presentation open before your turn and first click on UP arrow, then click on “Your entire screen”. Then a popup will come. Click on it and then click on “share”. Then move to your presentation so that it will appears on the screen. Make it full-screen and you can start the presentation. Kindly note that you can see only your slides while presenting.
7. After your talk is over, please **leave/stop screen sharing** and you would be back.
8. Please try to finish your talk 1 to 2 minutes before the actual time allotted to ensure a timely ending of the session.
9. Please use the link (from the Table) to join the respective parallel session.
10. Once you are in the room where your talk is scheduled, then you can make your presentation by sharing the screen as mentioned above. It is similar to any other Meeting.
11. If you have any further query, please contact any of us using the contact details given above.

SCHEDULE

Tuesday (07-09-2021)

<table>
<tr><td>Time: 09.15 – 9.50 hrs</td><td colspan="3">INAUGURAL SESSION</td></tr>
<tr><td>Time: 10.00-10.45 hrs</td><td colspan="3">Keynote Session: 07MCMK1</td></tr>
<tr><td colspan="4">Chair:
B L S Prakasa Rao
Speaker:
Arup Bose [A01]
Title of the talk:
Large Dimensional Random Matrices and its uses in statistical analysis</td></tr>
<tr><td colspan="4">Break for 5 minutes to join the parallel sessions</td></tr>
<tr><td>Time: 10.50 – 11.20 hrs</td><td>Time: 10.50 – 11.20 hrs</td><td>Time: 10.50 – 11.20 hrs</td><td>Time: 10.50 – 11.20 hrs</td></tr>
<tr><td>Session No.: 7MCMP1</td><td>Session No.: 7KUP1</td><td>Session No.: 7MDUP1</td><td>Session No.: 7BUCP1</td></tr>
<tr><td>Session Title:
P.V.Sukhatme Endowment Lecture
Chair:
K. Muralidharan
Speaker:
Debasis Bhattacharya [A09]
Title :
On the Selection of Loss Function for Estimation and Prediction Problems</td><td>Session Title:
Y.C.Narasimhulu Endowment Lecture
Chair:
Anup Dewanji
Speaker:
P G Sankaran [A10]
Title :
Modeling and analysis of current status competing risks data</td><td>Session Title:
R. Ravanan Endowment Lecture
Chair:
G. Gopal
Speaker:
P. Venkatesan [A14]
Title:
Machine Learning Algorithms for High Dimensional Survival Analysis</td><td>Session Title:
Classification Problem
Chair:
K. M. Sakthivel
Speaker:
V. S. Vaidyanathan [A68]
Title:
Estimation of the error probabilities in the classification of univariate gamma populations</td></tr>
</table>

Time: 11.25 – 13.25 hrs	Time: 11.25 – 13.25 hrs	Time: 11.25 – 13.25 hrs	Time: 11.25 – 13.25 hrs
Session No.: 7MCMP2	**Session No.: 7KUP2**	**Session No.: 7MDUP2**	**Session No.:7BUCP2**
Title of the Session: **Stochastic Modelling I** **Chair:** **B. Re. Victor Babu** **SPEAKERS** **Invited:** **1. Biswabrata Pradhan [A81]**, Stochastic comparisons of largest and aggregate claim amounts **2. Muralidharan K [A33],** A nonhomogeneous Poisson process through pathway model **Contributory:** **3. Vikram [C267],** Stochastic Modelling of a Computer System with Software Redundancy Subject to Hardware Inspection. **4. Kalpesh Prabhakar Amrutkar [C096]**, Assessment of Weather Based Crop Insurance using Markov Chain Modeling **5. S.D.Jeniffer [C089]**, Embedded Markov Modelling for Biological Sequence	**Title of the Session:** **Biostatistics I** **Chair: Rakesh Srivastava** **SPEAKERS** **Invited:** **1. Anil Gore [A15]**, Statistics for ODDD & Serendipity (Obesity, Diabetes, Dixit Diet) **2. Shibasish Dasgupta [A41]**, Application of Statistical Machine Learning in Biomarker Selection **Contributory:** **3. Faiz Noor Khan [C071]**, Predicting the Heart Disease Complication in Indian Type 2 Diabetes Mellitus Patients **4. S. Saranya [C214]**, An Eco-Epidemiological Model with Disease Infection and Treatment in Prey population recovered **5. Aditya Kumar Athotra [C006]**, A model to predict the Epidemic trajectory of Covid-19 cases in India using R **6. Ramya M S [C191]**, Significance of Overeating Behaviour- Related Obesity - An Etiopathogenesis of Type2 Diabetes Mellitus	**Title of the Session:** **Distribution Theory I** **Chair: S. Ravi** **SPEAKERS** **Invited:** **1. R. Vasudeva [A44]**, On the limiting behaviour of the upper extremes of random number of random variables **2. A. Krishnamoorthy [A36]**, Minimal Phase-Type Representation for Gamma Distribution **Contributory:** **3. Remya Sivadas [C197]**, Harris Extended Burr XII Distribution 4. **Rehana C J [C196]**, Exponential Intervened Geometric Distribution: Characterizations, Estimation and Applications **5. Nitin S L [C158]**, On Shifted Hybrid Log-Normal Distribution **6. Rakhi Ramachandran [C187]**, Zero-Inflated Alternative Hyper Poisson Distribution and its Modification	**Title of the Session: Entropy** **Chair: Abdul Sathar E. I** **SPEAKERS** **Invited:** **1. Rajesh G [A31]**, Nonparametric estimation of copula entropy under length-biased sampling **Contributory:** **2. Maya R [C131]**, Kernel Estimation of Tsallis Entropy and Cumulative Residual Tsallis entropy Under rho-mixing Dependent Data **3. Shubhashree Joshi [C228]**, Entropy Estimation for Generalized Pareto Distribution based on Ranked Set Sampling. **4. Omdutt Sharma [C161]**, Some Novel Entropy Measures and their Application in Dimension Reduction **5. Silpa Subhash [C230]**, Bivariate quantile-based entropy function and its properties in the context of reliability modelling **6. Richu Rajesh [C199]**, Kernel estimation of extropy function under length-biased sampling **7. K.K. Anakha [C023]**, DUS Inverse Kumaraswamy Distribution: A New non Monotonic Failure Rate Model

BREAK FOR 2 HOURS			
Time: 15.25 – 17.55 hrs	**Time: 15.25 – 17.55 hrs**	**Time: 15.25 – 17.55 hrs**	**Time: 15.25 – 17.55 hrs**
Session No.: 7MCMP3	**Session No.: 7KUP3**	**Session No.: 7MDUP3**	**Session No.:7BUCP3**
Title of the Session: **Stochastic Ordering** **Chair: Asha Gopalakrishnan** **SPEAKERS** **Invited:** **1. Fabrizio Ruggeri [A19],** New Classes of Priors based on Stochastic Orders: Theory and Applications in Reliability (Italy) **2. Neeraj Misra [A69],** A Review of Some Useful Results Arising in the Theory of Stochastic Orders **Contributory:** **3. Indhumathi J [C085],** Computational Approach for transient behaviour of finite source Retrial Queueing Model with multiple vacation and discouraged customers. **4. B. Somasundaram [C235]**, Analysis of MAP/PH/1 Queueing System with Negative Arrival, Vacation and Balking	**Title of the Session:** **Distribution Theory II** **Chair: T.P.M. Pakkala** **SPEAKERS** **Invited:** **1. Irshad M R [A53]**, Muth Distribution And Estimation Of A Parameter By UStatistics **2. Jorge Navarro [A72]**, Distorted distribution **Contributory:** **3. Bindu P. P. [C050]**, Skewed Double Extended Exponential Distribution and its Applications **4. Subhradev Sen [C243]**, The Circular Version of Xgamma Distribution: Properties and Applications **5. Shreyashi Basak [C226]**, Estimating the Mean Direction of a Wrapped Cauchy Distribution **6. Fasna K [C073]**, Discrete Mittag-Leffler Cauchy distribution: Estimation and Its Application	**Title of the Session:** **Reliability Theory I** **(M N Gopalan session)** **Organizer & Chair: S. C. Malik** **SPEAKERS** **Invited:** **1. D. D. Hanagal [A67]**, Correlated Positive Stable Frailty Models Based on Reversed Hazard Rate **2. S.C. Malik [A43]**, Regression Approach for Reliability Analysis of a Transformed Parallel-Series System **Contributory:** **3. V. M. Chacko [C054]**, On Joint Importance Measures For Multistate Reliability Systems **4. Ravinder Singh [C272]**, Reliability and profit analysis of a dissimilar cold standby system with Server Failure **5. Sushil Malik [C251]**, Reliability Evaluation of a Seven Components Non-Series Parallel System with Arbitrary Probability Distributions	**Title of the Session:** **Goodness of fit** **Chair: Parameswara Pandit** **SPEAKERS** **Invited:** **1. Sudheesh Kattumannil [A28]**, Some goodness of fit tests based on Stein's type characterization **2. Shalabh [A47]**, Goodness of Fit Based on R2 Information Criteria in Non-parametric Measurement Error Model **Contributory:** **3. Meghna Athwani [C136]**, Robust Estimation of Fixed Effects Panel Data Models with an Application to ASI data. **4. Banoth Veeranna [C046]**, Goodness-of-fit for the Bivariate Pseudo-Poisson Distribution **5. Pooja B S [C169]**, Mapping trends in the self-reported tuberculosis at the state level in India 1998-2020

5. **Sudhakara Babu Pallikonda [C244]**, N-Policy FMx/FEk/1 Vacation Queueing System with Server Start-up and Time-out 6. **D.Vamsi Priya [C262]**, A Non-Stationary Single Server Queueing Model With Bulk arrivals 7. **Meenakshi Yadav [C134]**, Analysis of a queuing theory in an organisation :A case study to improve quality service of supermarket 8. **K.Bharathi [C048]**, Maximum Flow Problem Analysis And Its Application	7. **G.Sirisha [C231]**, Properties of Compound Lifetime Distribution-II 8. **Faiza Rahman [C072],** Point Estimation for the Parameters of Consul Distribution	6. **Lakhwinder Singh [C106].**, Reliability Analysis of a cold standby Renewable system 7. **Ganesh Saherbrao Phad [C074],** Assessment of Climate Change in India by Correspondence Analysis 8. **A. Poompavai [C171]**, Forecasting Weather Patterns of Tamil Nadu Based on Data Mining Algorithms.	6. **S. Brindha Devi [C053]**, Percentage analysis of Theoretical Probability with Experimental Probability 7. **Sulaxana Bharali [C245]**, A Case of Non-normal Distribution in both Explained and Explanatory Variable 8. **Masum Raj [C130],** Correlation Coefficient Measure for Interval- Valued Intuitionistic Fuzzy Sets with its Application
Time: 18.00 – 19.30 hrs	**Time: 18.00 – 19.30 hrs**	**Time: 18.00 – 19.30 hrs**	**Time: 18.00 – 19.30 hrs**
Session No.: 7MCMP4	**Session No.: 7KUP4**	**Session No.: 7MDUP4**	**Session No.:7BUCP4**
Title of the Session: **Bayesian Analysis** **Chair:** **A. Loganathan** **SPEAKERS** **Invited:** **1. Naveen Naidu Narisetty [A58],** Bayesian Joint Estimation of Multiple Graphical Models	**Title of the Session:** **Special Session of IISA** **Chair:** **Shailaja Suryawanshi** **SPEAKERS** **Invited:** **1. Jogesh Babu [A77],** Density Quantile Function	**Title of the Session:** **Reliability Theory II** **Chair:** **Deepesh Bhati** **SPEAKERS** **Invited:** **1. S M Sunoj [A35]**, Relation between Relative Hazard Rates and Residual Divergence with some Applications to Reliability Analysis	**Title of the Session:** **Longitudinal Data Analysis** **Chair:** **Kanchan Jain** **SPEAKERS** **Invited:** **1. Sangita Kulathinal [A84]**, Cohort designs and register-based research

Contributory: **2. Kuki Kalpita Mahanta [C103]**, A Bayesian Analysis of Multivariate Accelerated Failure Time Model with Log-logistic hazard under Frailty Approach **3. Deenu Nadayil [C058]**, Bayesian Estimation in M/D/1 queue relative to LINEX loss function. **4. Pavitra Kumari [C165]**, Bayesian Analysis for Maxwell Distribution Function using Symmetric and Asymmetric Loss Function **5. Athirakrishnan R.B. [C044],** E-Bayesian and hierarchical Bayesian estimation for inverse Rayleigh distribution based on left censoring scheme	**2. Arvind Rao [A93],** Spatial Analytics for Pathology Informatics and Data Integration in Healthcare **3. Marepalli B. Rao [A97], TBA**	**Contributory:** **2. S.K. Chauhan [C056]**, Reliability Measures of a Non Series-Parallel System of Five Component with Different Flow of Information **3. Renu Garg [C198]**, Reliability Estimation in Generalized Maxwell Lifetime Model using Progressively First Failure Censored Samples **4. Jyoti Anand [C093]**, Comparison of Reliability Measures of a System under Different Repair Disciplines **5. Komal Shekhawat [C100]**, On Generating Families of Power Quantile Distributions	**Contributory:** **2. Lins Paul [C108]**, Covariance model selection in longitudinal data analysis **3. Ashlin Mathew P M [C041]**, Comparison of cause specific rate functions of panel count data with multiple modes of recurrence **4. Hariom Pachori [C082]**, A study of depression, anxiety and insomnia during COVID-19 lockdown in India **5. Anju J. B. [C035],** Modeling and Monitoring COVID-19 Monthly Infected Cases and Deaths

Time: 19.35 – 20. 20 hrs :
7MCMK2 : Keynote Session

Chair:
J. V. Deshpande

Speaker:
Vijay Nair [A02]

Title of the talk:
When did regression become so complicated? Machine Learning: Algorithms,Interpretability, and Applications in Banking

Wednesday (08-09-2021)

Time: 9.00-9.45 hrs: 8MCMK1 : Keynote Session

Chair:
K. Srinivasa Rao

Speaker:
Debasis Kundu [A03]

Title of the talk:
Weighted Least Squares Estimators for Sinusoidal Model Parameters

Break for 5 minutes to join the parallel sessions

Time: 9.50 – 11.50 hrs	Time: 9.50 – 11.50 hrs	Time: 9.50 – 11.50 hrs	Time: 9.50 – 11.50 hrs
Session No.: 8MCMP1	**Session No.: 8KUP1**	**Session No.: 8MDUP1**	**Session No.:8BUCP1**
Title of the Session: **Biostatistics II** **Organizer & Chair:** **Rakesh Srivastava** **SPEAKERS** **Invited:** **1. Mihir Gandhi [A76],** Eliciting Patient Preferences for Clinical and Economic Evaluation of Healthcare Interventions **2. Abhaya Indrayan [A74],** Direct use of clinical tolerance limits for assessing agreement: A robust nonparametric approach	**Title of the Session:** **Distribution theory III** **Chair:** **C. Satheesh Kumar** **SPEAKERS** **Invited:** **1. Jayakumar K [A54],** On Generalizations of Gompertz Distribution arising as Distributions of Random Maxima/Minima **2. Sebastian George[A24]**, A Review on Log-symmetric and Reciprocal Symmetric Distributions	**Title of the Session:** **Reliability Theory III** **Chair:** **Rajesh G.** **SPEAKERS** **Contributory:** **1. Sweety Kadyan [C254],** Stochastic Analysis of a Non-Identical Repairable System with Three Units and MRT, **2. Anju Dhall [C034],** A Stochastic system with Preventive maintenance over H/w and S/w subject to maximum operation time using RPGT	**Title of the Session:** **Time Series I** **Chair:** **Sudheesh Kumar, K.** **SPEAKERS** **Invited:** **1. Jitendra Kumar [A26],** Bayesian Inference for Merged Panel Autoregressive Model **2. Anoop Chaturvedi [A40],** Dynamic Space-time Panel Data Models: An Eigen-decomposition Based Bias-corrected Least Squares Procedure **Contributory:** **3. Anju Atmaram Bhagat [C033],** Forecasting and Instability of Onion Export from India

3. A Rajagopal [A88], Data Science In Health Science **4. T. Anbupalam [A56],** Exceptional longevity, cardiovascular health and metabolic profile	**Contributory:** **3. Rashid A. Ganaie [C193]**, A new generalization of power quasi Lindley distribution with applications in medical sciences **4.Md. Izhar Khan [C133]** , The Length-biased Powered Inverse Rayleigh Distribution with Applications **5.Anitta Susan Aniyan [C030]**, Alpha–Logarithm Transformed Pareto Distribution **6. A. Sagaya Christy Buelah [C204]**, Venkat Distribution and its Applications	**3. Gayathri.R [C075]**, An ordered approach on geometric vitality function representing residual and past life **4. Permila [C166]**, A 2-out-of-2: G System with Single Standby under Priority to Preventive Maintenance over Repair **5**. **Sandesh Shrikant Kurade[C209]** Uniform Demand with Variable Linear Holding Cost Inventory Model under Partial Backlogging **6**. **Subhadra Priyadarshini [C242]**, Survival of female breast cancer in reproductive age group: A popu-lation based study using SEER database **7. G. Prabavathi [C172]**, Accelerated Failure Time Model in Survival Analysis **8. Manas Ranjan Tripathy [C120]**, Accelerated Failure Time Models with Applications to Endometrial Cancer Data	**4. Mydam Rajendar [C146],** Time Series Analysis of Covid-19 Cases in Telangana State Using ARIMA MLP -ELP Prediction Models **5. S. Deepa [C059],** Time Series Modelling using Disaggregation for Forecasting CO2 Emission from Energy Sector of India **6. C. Devaki [C063],** Forecasting Analysis for Sugarcane Production in Tamil Nadu Using ARIMA Model

Time: 11.55 – 13.40 hrs	Time: 11.55 – 13.40 hrs	Time: 11.55 – 13.40 hrs	Time: 11.55 – 13.40 hrs
Session No.: 8MCMP2	**Session No.: 8KUP2**	**Session No.: 8MDUP2**	**Session No.: 8BUCP2**
Title of the Session: **Sampling Theory I** **Organizer & Chair:** **Raosaheb Latpate** **SPEAKERS** **Invited:** **1. R. Latpate [A62],** Adaptive Sampling and Negative Adaptive Cluster Sampling **2. Girish Chandra [A63],** Weighted Ranked Set Sampling For Skew Distributions **3. Piyush Kant Rai [A57],** Some Introduction To The Developments Of Estimation Methods Using Auxiliary Information In Small Area & Calibration Approach **Contributory:** **4. Boya Venkatesu [C052],** A New method of estimating the Process Spread using Confidence Interval of Sample Standard Deviation.	**Title of the Session:** **Statistical Finance** **Organizer & Chair:** **Ishapathik Das** **SPEAKERS** **Invited:** **1. Ishapathik Das [A46],** Robust Credit Risk Modelling using Generalized Linear Models **2. Ananya Lahiri [A64],** Lagged long memory covariance matrix analysis from Indian stock market **3. Arnab Chakrabarti [A50],** A new filtering technique for comovement networks from high-dimensional data. **Contributory:** **4. Manikanta Bhoi [C123],** Association of Screen Time with Depression, Anxiety and Stress for Young People (Age Group 14-25) amid COVID-19 Pandemic: A Case Study in Odisha.	**Title of the Session:** **Public Health Statistics** **Organizer & Chair:** **R. L. Shinde** **SPEAKERS** **Invited:** **1. Sanjay Zodpey [A98],** Human Resources for Health: Strategic options for transforming Health System **2. Anil Digambar Patil [A95],** Designed a model to predict the Epidemic trajectory of Covid-19 cases in India using R **3. Ajay Phatak [A94],** Exploring opportunities and challenges for a statistician in Public Health workforce. **Contributory:** **4. Muruganandham.S [C145]** Semi – Parametric Approaches For Tuberculosis Data Using Survival Analysis	**Title of the Session:** **Regression Analysis** **Chair:** **Anita Mehta** **SPEAKERS** **Invited:** **1. Ismail, B. [A49],** Empirical Likelihood Ratio Test for Autocorrelation in Least Squares Regression **Contributory:** **2. Satyanarayana [C218],** Efficient estimation of linear regression model in case of heteroscedastic errors **3. Neela Gulanikar [C154],** Study of Temporal Patterns in Hypergamy in Indian Marriages **4. Nihar Ranjan Panda [C156],** A Binary Logistic Regression Approach to Identify Factors Affecting Extravasation in Chemotherapy Treatment **5. Tofan Kumar Biswal [C256],** R-Optimal Designs for Generalized Linear Models **6. Sarojamma. B [C215],** Artificial Neural Networks Using NN Tool In Matlab On Weather Parameters.

BREAK FOR 1 HOUR 45 Minutes			
Time: 15.30 – 17.30 hrs	**Time: 15.30 – 17.30 hrs**	**Time: 15.30 – 17.30 hrs**	**Time: 15.30 – 17.30 hrs**
Session No.: 8MCMP3	**Session No.: 8KUP3**	**Session No.: 8MDUP3**	**Session No.: 8BUCP3**
Title of the Session: **Sequential Analysis** **Chair:** **M. Manoharan** **SPEAKERS** **Invited:** **1. Anup Dewanji [A17],** Analysis of sequential quality improvement plans to obtain confidence Bounds **Contributory:** **2. Abdullahi Sani Charanchi[C004]** A Study on Sequential Probability Ratio Test (SPRT) Based on GASP for Resubmitted Lots under Burr-Type XII **3. Lishamol Tomy[C110],** A New Single Parameter Trigonometric Distribution for Modelling Survival Times of Cancer Data **4. Akash Pawar [C011]**, Identification of key gene signatures for the overall survival of ovarian cancer	**Title of the Session:** **Distribution Theory IV** **Chair:** **Manoj Chacko** **SPEAKERS** **Invited:** **1. Manjunath, B. G. [A48],** Bivariate pseudo-Poisson distribution **Contributory:** **2. Nandhini V [C148],** Record-Based Transmuted Power Lomax Distribution : Theory and Application **3. K. Dhivakar [C066],** Transmuted Sine Dagum Distribution and its Properties **4. Maryam Mohiuddin [C129],** On The Alpha Power Transformed Quasi Aradhana Distribution With its Properties **5. R. B. Ade [C185],** The New Length Biased Quasi Lindley Distribution and its Applications	**Title of the Session:** **Stress - Strength Models** **Chair:** **Aquil Ahmed** **SPEAKERS** **Invited:** **1. Somesh Kumar [A52],** Inference on a New Stress-Strength Index **Contributory:** **2. Tulika Rudra Gupta [C258],** Estimating Stress-strength Index for Exponential Populations with a Common Scale **3. Sibil Jose [C229],** Estimation of Stress Strength reliability in Generalized Pareto Model **4. Kapil Kumar [C097],** Classical Estimation of Stress-Strength Reliability in a Family of Lifetime Models under Progressive Censoring **5. Indrajeet Kumar [C086],** Estimation of Stress-Strength Reliability of Inverse Pareto	**Title of the Session:** **Statistical Models and Analysis** **Chair:** **Ranjitha Pandey** **SPEAKERS** **Contributory:** **1. Murshid Kamal [C144] ,** An Application of Neutrosophic Programming Technique in Multi objective Assignment Problems under Type-2 Fuzzy Parameters **2. Sathya Narayana Sharma K [C217]** Design of Reliability Sampling Plans using Neutrosophic Three Parameter Weibull Distribution under Time Truncation **3. Saranya C R [C213]** A Note on Life Test Sampling Plans based on Neutrosophic BirnbaumSaunders Distribution **4. B.M.Nayana [C153]** A Neutrosophic Approach on DUS-Weibull Distribution

5. Oindrila Roy Chowdhury [C160] HER2, ER and PR Breast Cancer Survival Enumeration by Classical and Bayesian Approaches: An Illustration with SEER database **6. A. Dhanalakshmi [C065],** Common Neighborhood Energy of Unicyclic Graph **7. M Gnanasekaran [C078],** Application Of Diffeology In DNA Formation	**6. Govvada Tharun [C080],** Identification of Risk Factors Associated with Overweight-obeys on Urban Area of Visakhapatnam **7. Rami Reddy Munnangi [C189],** Extreme value charts & Analysis of Means based on Exponentiated Inverse Kumaraswamy distribution	Distribution using Progressively Censored Samples **6. Alka Rani [C014],** A Non-Probabilistic Information Measure for Intuitionistic Fuzzy Matrix & Application **7. Anjaly [C031],** Fuzzy Matrices: An application	**5. Maruti Ramrao Bhosale [C128]** Fuzzy Closed Loop Green Supply Chain Models **6. Joshy C G [C092]** Estimation of Trend and Growth Rate of Shrimp Production in India Using Statistical Models **7. Devendra Kumar [C064],** Generalized Topp-Leone distribution based on order statistics with application to tissue damage proportions in blood **8. Arthi Shirsat [C039]** Activity On Daily Basis During Covid Pandemic
Time: 17.35 – 19.35 hrs	**Time: 17.35 – 19.35 hrs**	**Time: 17.35 – 19.35 hrs**	**Time: 17.35 – 19.35 hrs**
Session No.: 8MCMP4	**Session No.: 8KUP4**	**Session No.: 8MDUP4**	**Session No.: 8BUCP4**
Title of the Session: **Stochastic Modelling II** **Chair:** **Shashi Bhushan** **SPEAKERS** **Invited:** **1. P R Vittal [A37]** Interspike Interval Density of Neuron Models with Simulation of Refractory Time	**Title of the Session:** **Biostatistics III** **Chair:** **Sebastian George** **SPEAKERS** **Invited:** **1. Thomas Mathew [A18]** Accurate Confidence Intervals for Inter-Laboratory Calibration and Common Mean Estimation	**Title of the Session:** **Distribution Theory V** **Chair:** **G.V.S. Anjeneyulu** **SPEAKERS** **Invited:** **1. Subhash Bagui [A73],** Convergence of Known Distributions to Normality or Non-normality and a Few Counter Examples in CLT	**Title of the Session:** **Sampling Theory II** **Chair:** **N. Ch. Bhattacharyulu** **SPEAKERS** **Invited:** **1. Priyaranjan Dash [A45],** Some Practical Aspects of Cut-Off Sampling in Agricultural Surveys

2. Deepak, T. G. [A30] On Some Classes of Probability Distributions Governed by Markov Processes **Contributory:** **3. R. K. Bhardwaj [C201]**, MTSF and Profit Evaluation of a Repairable Cold Standby System **4. Mahesh Kumar Panda [C115]** Model Robust R-Optimal Designs for Mixture Experiments **5. A.M Girija [C076]** Analysis of COVID19 Patient Arrival Pattern with Self-Similarity using M/M/1 Queuing Model **6. K. Thilagavathy [C255]** Analysis of Queues with Markovian Arrival Process, Fluctuating modes of service, Reneging of customers, Phase types services and repairs	**2. Kanchan Jain [A66]** Using Copulas for Bayesian Meta-analysis **Contributory:** **3. D.Lalitha Devi [C107]**, Secular Trends in Dietary Patterns and Body Mass Index Among Youth: A Case Study **4. Makina Venkata Lavanya[C117]** Data Reporting and Quality of Health Management Information System Trends In Andhra Pradesh and Telangana during 2017-2020 **5. Aabhinav N Madhavan [C002]** Impact Analysis of Security Breaches in American Health Sector **6. Ujjwal Roy [C259]** Use of Genetic Algorithm in Type-II Progressive Censoring Scheme	**2. C. Satheesh Kumar [A60]** On zero-inflated logarithmic series distributions and their generalizations **Contributory:** **3. Mohammad Azam Khan [C140]** Moments of Kumaraswamy log-logistic Distribution through Generalized Record Values **4. Aliyu Ismail Ishaq [C013]** A New Maxwell-Log Logistic Distribution with Application to the COVID19 Mortality Rate Data (Nigeria) **5. H. Usha [C081]** On Mixture of Logistic Type Distribution and its Applications **6. Sneha Chandran C [C234]** Some Characteristic of Midquantile	**2. K. B. Panda [A85],** On Estimation of Finite Population Mean Using Variants of Ratio and Product Estimators **Contributory:** **3. Gopa Chattapadhyay [C079]** , On Efficient Ratio-cum-exponential Product Estimation For Estimating Finite Population Mean Using Two Auxiliary Variables **4. Anurag Gupta [C038]** Ratio in Ratio Type Exponential Strategy for the Estimation of Population Mean **5. Madhusmita Samantaray[C113]** A Modified Product-type Estimator for Estimating Population Mean Using Population Correlation Coefficient **6. Sushree Sarita Parida [C252]** Efficient Hierarchic Ratio-based and Product-based Estimators of Population Mean using Variable Transformation

Time: 19.45 – 20. 30 hrs : 08MCMK2 : Keynote Session

Chair: Isha Dewan

Speaker: Hira L. Koul [A04]

Title of the talk:
Minimum Distance Estimation in Linear Errors-in-Variables Regression Model

Thursday (09-09-2021)

Time: 8.55 – 9.25 hrs	Time: 8.55 – 9.25 hrs	Time: 8.55 – 9.25 hrs	Time: 8.55 – 9.25 hrs
Session No.: 9MCMP1	**Session No.: 9KUP1**	**Session No.: 9MDUP1**	**Session No.:9BUCP1**
Session Title: **A.M.Mathai Endowment Lecture** **Chair:** **D.D.Hanagal** **Speaker:** **Serge Provost [A11]** **Title:** Adjusted Saddle point Approximation and Generalized Pearson Curve System	**Session Title:** **M.P.Sastry Endowment Lecture** **Chair:** **P. Rajashekhara Reddy** **Speaker:** **T. P. M. Pakkala [A12]** **Title:** Optimal Inventory Policies when the Purchase Price is Stochastic	**Session Title:** **D.D.Hanagal Endowment Lecture** **Chair:** Debasis Bhattacharya **Speaker:** **K. S. Rao [A13]** **Title :** Nonstationary Tandem Queuing Models with Load Dependent Service and Their Applications	**Session Title:** **Lomax Distribution** **Chair:** **Vaidyanathan, V. S.** **Speaker:** **Ravindra Khattree [A32]** **Title:** Lomax, Exponentiality and Related Issues
Time: 9.30 – 11.00 hrs	**Time: 9.30 – 11.00 hrs**	**Time: 9.30 – 11.00 hrs**	**Time: 9.30 – 11.00 hrs**
Session No.: 9MCMP2	**Session No.: 9KUP2**	**Session No.: 9MDUP2**	**Session No.:9BUCP2**
Title of the Session: **Biostatistics IV** **Organizer & Chair:** **Prafulla Swain** **SPEAKERS** **Invited:** **1. Alok Dwivedi, (USA) [A82]** Survival analysis involving a longitudinal exposure: neuro-psychiatric symptoms and mild cognitive Impairment.	**Title of the Session:** **Financial Time Series** **Chair:** **Neelesh Upadhaye** **SPEAKERS** **Invited:** **1. Kanchan Mukherjee (UK)[A21]** Re-estimation in GARCH models; Asymptotics, applications and bootstrapping	**Title of the Session:** **Reliability Theory IV** **Chair:** **Priyaranjan Dash** **SPEAKERS** **Invited:** **1. Srinivasa Rao Gadde [C240]**, Multiple Dependent State Repetitive Sampling Control Chart for Monitoring Rayleigh Distributed Data	**Title of the Session:** **Ranked Set Sampling** **Chair:** **K. B. Panda** **SPEAKERS** **Invited** **1. Manoj Chacko [A38]** Applications of Ranked Set Sampling in Parametric Estimation when Ranking is Imperfect

2. V. Ravi [A83] Discrete models in survival analysis. **3. Gajendra K. Vishwakarma [A87]** Algorithm for Outlier Detection in Time Series Model **4. Manoj Kumar [C279]**, Bayesian Inference for the Number of Species under Different Prior: Using Poisson-Lindley Model	**Contributory:** **2. M. Vijaya Lakshmi [C277]**, An ARIMA Analysis of The Different Currencies with Indian Rupee Exchange Rate in India **3. Vidya V. P. [C266]** Uniform Truncated Autoregressive Conditional Duration Models **4. Sameera Banu P [C208]** Prediction and Forecasting of Automotive Sales in India Using ARIMA Models **5. Kumar C [C104]** Outlier Detection For Wholesale Price Index Of Onion In India	**Contributory:** **2. Amit Dev [C021]** Reliability Analysis of a Three Unit Repairable System using Markov Approach **3. Naveen Kumar [C151]** Stochastic Modelling of a System of Non-Identical Units with Priority for Operation and Repair to Duplicate Unit subject to Conditional Failure of Repairman **4. U.Ramkiran [C190]** Linear Failure Rate Distribution – A Reliability Sampling Plan **5. Shital S. Patel [C224]** Study on Inventory Model on Effect of Partial Backlogging Under Unsteady Deterioration Rates with Exponential Demand	**Contributory:** **2. Sajeevkumar N K [C207]** Estimation of the location parameter of certain distributions with known coefficient of variation using moving extreme ranked set sampling. **3. Raman Nautiyal [C188]** Alternate Ranked Set Sampling for Skewed and Mound Shaped Symmetric Distributions: Accounting for Forestry and Environmental Research **4. Pratima Bavagosai [C175]** Some Inferential study to Compare two Rayleigh populations using Joint Ranked Set Sampling **5. Vyomesh Nandurbarkar [C270]** Estimating shape and scale parameters of shape and scale family of distributions using moving extreme ranked set sampling
Time: 11.05– 12.35 hrs	**Time: 11.05– 12.35 hrs**	**Time: 11.05– 12.35 hrs**	**Time: 11.05– 12.35 hrs**
Session No.: 9MCMP3	**Session No.: 9KUP3**	**Session No.: 9MDUP3**	**Session No.: 9BUCP3**
Title of the Session: **Financial Statistics** **Chair:** **T. V. Ramanathan** **SPEAKERS**	**Title of the Session:** **Hypothesis Testing** **Chair:** **Sudhansu S. Maiti** **SPEAKERS**	**Title of the Session:** **Accelerated Life Testing** **Chair:** **Muthukrishnan, R.** **SPEAKERS**	**Title of the Session:** **Statistical Quality Control I** **Chair:** **R. Jaisankar** **SPEAKERS**

Invited: **1. O P Mall [A86]** Changing Landscape of Data and Methods in the Indian Financial System **Contributory:** **2. Rashi Dangayach [C192]** Impact Of Crude Oil Prices On Stock Markets **3. D. Mallikarjuna Reddy [C119]** A Simple Adaptive Exclusion Based Measure of Core Inflation for India **4. Tripura Sundari.C.U. [C257]** An empirical Analysis and the Data visualization techniques that validates the Environmental degradation of Indian economy **5. Aabhilash N Madhavan [C001]** Market Potential Analysis of Web Application Developers among Independent Software Vendors	**Invited:** **1. H. V. Kulkarni [A70]** Multisample tests in the presence of nuisance parameters with specific reference to Data on manifolds. **Contributory:** **2. Anjana Mondal [C032]** Testing Against Ordered Alternatives in One Way ANOVA Model With Exponential Errors **3. Yogesh Rajendra Yewale [C271]** Application of Monte Carlo Simulation in Testing of Birthday Paradox **4. A Rajini [C186]** Copula Analysis of Guntur Weather Data **5. Vinaykumar L N [C268]** Efficient p-rep designs for early generation breeding trials	**Invited:** **1. Shovan Chowdhury [A42]** On the economic design of optimal sampling plan under accelerated life test setting **Contributory:** **2. Ahmadur Rahman [C007]** Maximum Likelihood Estimation of Parameters of Nadarajah Haghighi Step Stress Accelerated Life Test Model **3. Sreelakshmi S [C238]** Parameter Estimation of Gompertz Distribution under Constant Stress Accelerated Life Testing using Progressive Type-II Censoring **4. Puran Rathi [C178]** Reliability Modelling of a Parallel-Cold Standby System with Provision of Repair Priority **5. P. Sonker [C179]** Performance Evaluation and Stochastic Analysis of Cold Stand by System with Switch Mechan-ism Inspection and Server Failure	**Invited :** **1. S. B. Mahadik [A27]** The Two Sided SPRT Control Charts **Contributory:** **2. D Manjula [C125]** New Screening procedure on double Sampling plan involving various quality parameters **3. Shruti Kumar [C227]** Statistical Quality Analysis of Muhana Fruit Mandi, Jaipur on the basis of Primary Data. **4. Amartya Bhattacharya [C018]** Estimation of Generalized Process Capability Index Copy for a class of Generalizations of Lindley Distribution and its Natural Discrete Version **5. Anil Arepalli [C026]** Group Acceptance Sampling Plans for life tests based on the new weighted exponential Distribution

Time: 12.40– 13.40 hrs	Time: 12.40– 13.40 hrs	Time: 12.40– 13.40 hrs	Time: 12.40– 13.40 hrs
Session No.: 9MCMP4	**Session No.: 9KUP4**	**Session No.: 9MDUP4**	**Session No.: 9BUCP4**
Title of the Session: **Distribution Theory VI** **Chair:** **Irfan Ali** **SPEAKERS** **Contributory:** **1. Girish Babu M [C077]** On some properties of Yun Exponential distribution **2. Alphonsa George [C016]** A new distribution from Poisson-X family **3. Mohammad Anas [C139]** Generalized Equilibrium Weibull distribution and Its Applications **4. Maya T Nair [C132]** Estimation of Parameters of Inverse Gaussian Distribution	**Title of the Session:** **Contingency Tables** **Chair:** **R. Elangovan** **SPEAKERS** **Contributory:** **1. Nutan Vijay Khangar [C159]** Partition of Chi-squared Statistic for Multiway Contingency Tables using Orthogonal Polynomials **2. Kirtee Kiran Kamalja [C099]** CATANOVA for Multiway Contingency Tables **3. Rahul [C181]** A Comparative Analysis of Two-Way Fuzzy ANOVA Model with Repeated Measure-ment Per Cell **4. Manivasagan.K [C124]**, Regression Models for Survival Data	**Title of the Session:** **Reliability Analysis** **Chair:** **Neha Garg** **SPEAKERS** **Contributory:** **1. Anuradha [C037]** Profit Analysis of 1-out-of-2:G System with Priority to Repair and Failure of Service facility **2. S. Amirtha Rani Jagulin [C020]** Burden assessment Schedule of primary care - givers of psychoso-matic patients using Reliability – urban and rural comparison **3. Aswin I.C. [C043]** Some reliability aspects of record values using quantile functions **4. M. Manikandan [C122]** Multivariate Statistics to Survival Data	**Title of the Session:** **Fuzzy Soft Set Theory** **Chair:** **Deepak, T. G.** **SPEAKERS** **Contributory:** **1. Sonia Saini [C236]** Application of Interval Valued Intuitionistic Fuzzy Soft Sets in Decision Making Problems **2. J. Sengamalaselvi [C220]** A Study on Intuitionistic Fuzzy Soft Matrices in Day to Day Life **3. Deepika [C061]** Common Fixed Point Theorem in Fuzzy Metric Space **4. Diptismita Jena [C068]** Forecasting of Age specific mortality of Odisha Using the Lee Carter model
BREAK FOR 1 HOUR 45 Minutes			

Time: 15.30 – 17.30 hrs	Time: 15.30 – 17.30 hrs	Time: 15.30 – 17.30 hrs	Time: 15.30 – 17.30 hrs
Session No.: 9MCMP5	**Session No.: 9KUP5**	**Session No.: 9MDUP5**	**Session No.: 9BUCP5**
Title of the Session: **Sampling Theory III** **Chair:** **Rajesh Tailor** **SPEAKERS** **Invited:** **1. Neha Garg [A61]** Log-type Estimators of Finite Population Mean in Stratified Random Sampling using Calibration Approach **Contributory:** **2. Litty Pius [C111]** A New Approach to Distributed Subsampling **3. Prajna Prasamita Mohanty[C173]** On Estimation of Population Variance Through Ratio and Exponential Ratio Estimators **4. T. Deepthi [C062]** Nested Approach for Dimensionality Reduction of SORSD Model **5. Ameen Saheb Sk [C019]** An Algorithmic Approach to Constructing Second Order Rotatable Designs	**Title of the Session:** **Statistical Inference** **Chair:** **Madhuchhanda Bhattacharjee** **SPEAKERS** **Invited:** **1. Manisha Pal [A79]** Exact Inference In A Multinomial Distribution **Contributory:** **2. G. Jayakodi [C088]** An effect of different right censored simulated data for some four parameters lifetime distribution based on the Maximum Likelihood Estimation **3. Prithul Chaturvedi [C176]** Parameter Estimation in four-parameter Harris Extended Weibull distribution with Application to Clinical Data **4. Menakshi Pachori [C138]** Calibration Estimation of Population Mean Using Median in Stratified Sampling **5. R. Madhanagopal [C112]** Electric Cars Selection Using	**Title of the Session:** **Data Science** **Chair:** **Balaji Raman** **SPEAKERS** **Invited:** **1. Rangan Gupta [A78]** Forecasting the Historical Realized Variance of Oil-Price Movements: The Role of Gold-to-Silver and Gold-to-Platinum Price Ratios **2. Balaji Raman [A71]** Improving Promotional Effectiveness for Consumer Goods - A Dynamic Bayesian Approach. **3. Martin L. William [A96]** Scheduling Email Campaigns to Maximize Favorable Response Rate: A Multinomial Model Solution **Contributory:** **4. Senthilvel Vasudevan [C221]** Applications of predicting models in vision-threatening disease: A Hospital-Based Retrospective Study	**Title of the Session:** **Demography** **Chair:** **R. Vishnu Vardhan** **SPEAKERS** **Invited:** **1. B. Muniswamy [A59]** Forecasting Rural Health Infrastructure And Key Demographic Indicators In India **Contributory:** **2. Hemant Kumar [C084]** Application of yield stability index to rank chickpea genotypes in north east plain zone of India **3. Lipsa Rani Bhoi [C109]** The Present Status and Future Prospects of Tuberculosis: A Case Study in Odisha **4. Ashlin Varkey [C042]** Relationship between COVID-19 and blood group: A quantile based study **5. K. Sangeetha [C211]** Secrets of Cow Milk to Combat Obesity and to Develop Immunity – A Case Study

6. Vicky Kumar [C265] Predictors of Low Birth Weight children (< 5 years of age) with reference to NFHS-4 data **7. Ahteshamul Haq [C008]** Significance of multi-objective optimization in logistics problem for multi-product supply chain network under the intuitionistic fuzzy environment	Multi- criteria Decision Making Methods **6. Urmila [C260]** Statistical Analysis of Satisfaction Level of Users of Information Centre at University Level **7. SK Althaf Rahaman [C017]** Challenges and Issues in Predictive Data Analytics	**5. Ruchika Lalla [C203]** Application of Supervised Machine Learning Techniques to Estimate Waste Generation in Indian Cities	**6. S. Sundarabalan [C250]** Logistic Regression Modeling for Maternal Determinants of Low Birth Weight **7. Sanjib Kumar Gupta [C212]** Analysis of incomplete two dimensional warranty data
Time: 17.35 – 20.35 hrs **Each talk is for 40 - 45 minutes**	**G. Sankaranarayanan Endowment Session**		
Session I: 9MCMS1	**Chair : A. Krishnamoorthy**		
Speakers: **1. M. K. Ghosh [A05],** Risk-sensitive differential games with reflecting diffusions **2. V.S. Borkar [A06],** Stochastic Approximation: Robbins-Monro And Its Variants			
Session II: 9MCMS2	**Chair: V. Thangaraj**		
Speakers: **1. S. R. S. Varadhan [A07]**: Some calculations involving Birth and Death Processes. **2. K. B. Athreya [A08]**: One uniform (0,1) rv will do.			

Friday (10-09-2021)

Time: 09.00 – 10.30 hrs
10MCMK1: Special Session to Honour Professor C. R. Rao

Chair: Debasis Kundu
Speakers:
1. Bimal Roy [A89]; **Title of the talk: E - Voting**
2. Rajender Parsad [A90]; Title of the talk: TBA

10.35 – 13.00 hrs : Parallel Sessions

Time: 10.35 – 12.05 hrs	Time: 10.35 – 12.05 hrs	Time: 10.35 – 12.05 hrs	Time: 10.35 – 12.05 hrs
Session No.: 10MCMP1	**Session No.: 10KUP1**	**Session No.: 10MDUP1**	**Session No.: 10BUCP1**
Title of the Session: **Neural Networks** **Chair:** **B. Muniswamy** **SPEAKERS** **Invited:** **1. Ranjit Paul [A39]** Wavelets based Artificial Neural Network Technique for Forecasting Agricultural Prices **Contributory:** **2. K. Supriya [C095]** Fitting of ANN model to forecast the damage caused by Yellow Stemborer (Scirpophaga incer-tulas) in Telangana State	**Title of the Session:** **Estimation Theory** **Chair:** **S. M. Sunoj** **SPEAKERS** **Invited:** **1. Sudhansu S. Maiti [A23]** Estimation of probability density/mass and cumulative distribution functions used in life test experiments **Contributory:** **2. Kumari Priyanka [C105]** Item Sum Technique aided with Calibration Technique to Estimate Sensitive Population Mean in Successive Sampling	**Title of the Session:** **Reliability** **Chair:** **R. Ravanan** **SPEAKERS** **Invited:** **1. R. Elangovan [A55]** Variable Selection for Cluster Failure Time Data **Contributory:** **2. Deepak M. Sakate [C060]** Consistent Variable Selection Using R-Square Criterion In Generalized Linear Models **3. Kavya P [C098]** A new lifetime model for non-monotone failure rate	**Title of the Session:** **Data Analysis** **Chair:** **Ismail, B.** **SPEAKERS** **Invited:** **1. R.Muthukrishnan [A34]** Robust Statistical Techniques for Classification and Data Analysis **Contributory:** **2. D.Srikala [C239]** Logistic Regression vs Kohonen Supervised SOM in Classifying the Aged Persons in Tamil Nadu State – a Study on NSSO 71st Round Health Data

3. Mohd Sakib [C142] Multi-Step Time Series Forecasting of Electric Load Using Convolutional Neural Network and Bi-directional Long Short Term Memory: An Ensemble Approach **4. Ratan Kumar Thakur [C194]** Comparative performance analysis of Bayesian Regularization and Levenberg - Marquardt Training Algorithm for the prediction of noise level in the Industrial zone of Lucknow **5. A.Venmani [C264]** Radial Basis Function (RBF) Network in the Prediction of Leprosy in anti-leprosy vaccination trial	**3. Anita Kumari [C028],** Estimation in Inverse Pareto Distribution under Joint Progressive Type II Censoring **4. Jiji Jose [C090],** Estimation Methods for Discrete New Generalized Pareto Distribution and its Application **5. Raveendra Naika T [C195],** Maximum likelihood estimation of the parameter in purturbed gamma model using EM algorithm	**4. Neetu Dabas [C155]** Availability Analysis of Parallel System using Inspection for Repair Activities **5. Mekala Sony [C137]** Estimation of Exponential Stress and Exponentiated Exponential Strength Reliability Model with Real Data Sets	**3. Rajesh Yadav [C184]** VICKS: A study on distributed Virtual Cloud Key Storage Technologies **4. Swarnalatha. E [C253]** The Role of Distributions in Data Science **5. M.Narsimulu [C149]** A Study on Advanced Statistical Techniques in Data Science
Time: 12.10 -13.00 hrs: ISPS Awards for the year 2020 **Session Venue : MCMPA** **Honoring the Awardees:** **ISPS Fellowship** **Distinguished Statistician Award** **K. S. Rao Best Researcher Award**			
BREAK FOR 1 HOURS 15 MINUTES			

Time: 14.15 – 16.00hrs	Time: 14.15 – 16.00hrs	Time: 14.15 – 16.00hrs	Time: 14.15 – 16.00hrs
Session No.: 10MCMP2	**Session No.: 10KUP2**	**Session No.: 10MDUP2**	**Session No.: 10BUCP2**
Title of the Session: **Time Series II** **Chair:** **K. Jayakumar** **SPEAKERS** **Invited:** **1. K. K. Jose [A80]** Four Decades of Non - Gaussian Time Series Modelling **Contributory:** **2. Prashant Dhamale [C174]** Comparative Study of the Various Summary Statistics to Locate the Connections in a Graphical Model. **3. Piyush Raja [C168]** A Statistical Methodology to Identify Jamming Attacks in WSNs **4. V. Sumalatha [C246]** Combinatorial Models for Forecasting Short Term Road Traffic **5. D. Manohar [C126]** Markov Switching Model for Air Traffic flow Forecasting	**Title of the Session:** **Order Statistics** **Chair:** **T. Ganesh** **SPEAKERS** **Contributory:** **1. Abdul Nasir Khan [C003]** Order Statistics from the Ishita distribution and Associated Inference **2. Nancy Khandelwal [C147]** Estimation of Common Scale Parameter of Multifarious Pareto Populations Based on Generalized Order Statistics **3. Aditi Kumari [C005]** Tests of fit for the one-sided Levy distribution **4. N Mohan [C141]** Analysis Of Survival Methods For Stock Market In India's NIFTY Data During Covid-19 **5. D. M. Patel [C162]** An Inventory Model for Deteriorating Items Inventory Different Deterioration with Three Tired Prices and Stock Dependent Demand	**Title of the Session:** **Applied Statistics** **Chair:** **M. Hemanth Kumar** **SPEAKERS** **Invited:** **1. M. Manoharan [A99]** Official Statistics and Revisions in Indian GDP - An Analytical Approach **Contributory:** **2. Satheenthar A. S. [C216]** Extended Rayleigh distribution: Properties, estimation, and applications **3. Sumeet Saurav [C247]** Detection of outlying observa-tion and its impact in a desig-ned bioequivalence trial **4. M.S. Barak [C047]** Reliability Analysis of Redundant System Subject to Refreshment Provided To The Server During His Job **5. Patil Suvarna Prashant [C273]** Interval Estimation for Alpha Power Half Logistic Distribution	**Title of the Session:** **Statistical Quality Control II** **Chair:** **Parmil Kumar** **SPEAKERS** **Contributory:** **1.Sumit Kumar [C248]** Parametric inference of generalized process capability index Cpyk for the power Lindley **2. Harwinder Kaur [C083]** Multi Summation Identities Involving Ratio of q-Basic Infinite Products **3. Anu P. Mathew [C036]** Building Brand Loyalty through Lifestyle Brands **4. V. Sai Jyothsna Devi [C205]** An EPQ Model with Deteriorating Items with Mixture of Weibull Production and Constant Demand **5. Maneesh Kumar [C121]** Inferences for Modified Lindley Distribution under Order Statistics with Application to COVID-19's Data

6. **Madhusmita Tripathy [C283]** Critical Analysis of Women Statistics	**6. S. Jayalakshmi [C278]** Performance Measures of Repetitive Group Sampling for Truncated Life Tests Based on Percentiles Using Exponentiated Frechet Distribution **7. Rahul T [C282]** New Parameterization of Stochastic Conditional Range Models	**6. Neeraj [C274]** Statistical Analysis of a Cold Standby System with Preventive Maintenance and Repair operating under different Weather Conditions subject to Inspection **7. Bhukya Rajender [C049]** Extremal Spatial Analysis	**6. Mahfooz Alam [C116]** Ratio and Inverse Moments of Dual Generalized Order Statistics of Exponentiated Weibull Distribution **7. Mihir Dash [C284]** A Vector Autoregressive Market Model for IT Sector Stocks in India
Time: 16.05 – 17.55 hrs	**Time: 16.05 – 17.55 hrs**	**Time: 16.05 – 17.55 hrs**	**Time: 16.05 – 17.55 hrs**
Session No.: 10MCMP3	**Session No.: 10KUP3**	**Session No.: 10MDUP3**	**Session No.: 10BUCP3**
Title of the Session: **Time Series III** **Chair:** **Anoop Chaturvedi** **SPEAKERS** **Invited:** **1. Neelesh S Upadhye [A22]** Estimation of the Parameters of Vector Autoregressive (VAR) Time Series Model with Symmetric Stable Noise **2. Abdul Sathar E I [A20]** An ordered approach on geometric vitality function for information analysis	**Title of the Session:** **Stochastic Finance** **Chair:** **T. P. M. Pakkala** **SPEAKERS** **Invited:** **1. Santanu Dutta [A16]** Modeling long term asset loss and market risk estimation **Contributory:** **2. Anima Bag [C275]** Replenishment model for Decaying Items with Entropy in a Fuzzy Environment under Inflation	**Title of the Session:** **Reliability VI** **Chair:** **Shovan Chowdhury** **SPEAKERS** **Invited:** **1. T.V Ramanathan [A75]** Focused Information Criterion: Some Recent Developments **Contributory:** **2. Naveen Nandal [C152]** Availability Analysis of a Cold Standby System of Three Components with Arbitrary Distributions of Failure and Repair Times	**Title of the Session:** **Survival Analysis** **Chair: Ananya Lahiri** **SPEAKERS** **Contributory:** **1. Intekhab Alam [C087]** Inference on the adaptive progressively hybrid censoring scheme for OLiHL distribution **2. Durga Vasudevan [C069]** Some Characterizations of Bivariate Proportional Reversed Hazard Class **3. Sisuma S [C232]** Proportional Cause-specific Hazards Model for Recurrent events Models for Survival Data

Contributory: **3. Varun Agiwal [C263]** Bayesian Estimation of the Polynomial Time Trend AR(1) Model through Spline Function **4. P. Sumithra [C249]** Time Series Modelling for Air Quality Index and Forecasting **5. Roshni A.[C202]** Cricket Team Selection Based On Players Efficiency: DEA Without Explicit Input	**3. Ananthakrishnan.S [C024],** Design of In-house Test method for assuring Packing quality of Bottled spirits **4. Sandip Parida [C210]** Factors affecting procurement of food grains by Food Corporation of India. **5. A.Peter [C167]** Identification of Credit Card Fraud Using Deep Learning Techniques **6. Jitender Kumar [C091]** Stochastic Modeling of Blast Furnace System in Steel Industry	**3. Ajay Kumar [C010]** Performance Analysis of Redundant System Subjected to Inspection with Reboot Delay and Refreshment Facility **4. Chhama Aggarwal [C057]** Profit Analysis of a Standby Re-pairable System with Arrival time and rest of server Between repairs **5. R. Kaur [C200]** Reliability and Cost Benefit Analyses of Renewable System **6. M.S.Kadyan [C094]** Improving Industrial Systems Reli –ability An Application in Dairy Plant	**5. S. Arunkumar [C040]** Analysis of Censored Data for Survival Model with Time Dependent Covariates **6. Rajeev Kumar [C182]** Bootstrap Variance Estimation Technique under Dual Frame Surveys **7. Dhiraj Yadav [C280]** Profit Analysis of a Redundant System with failure of Standby unit **8. Seema S. Nair [C281]** Estimation of Generalized q-logistic Distribution: A Comparative Study
Time: 18.00 – 19.45 hrs	**Time: 18.00 – 19.45 hrs**	**Time: 18.00 – 19.45 hrs**	**Time: 18.00 – 19.45 hrs**
Session No.: 10MCMP4	**Session No.: 10KUP4**	**Session No.: 10MDUP4**	**Session No.: 10BUCP4**
Title of the Session: **Bayesian Analysis** **Chair:** **Somesh Kumar** **SPEAKERS** **Invited:** **1. Scott Holan [A29]** Bayesian Nonparametric Multivariate Spatial Mixture Mixed Effects Models	**Title of the Session:** **Design of Experiments** **Chair:** **B. S. Biradar** **SPEAKERS** **Invited:** **1. Poonam Singh [A91]** Mixture Designs based on Definitive Screening Composite Designs	**Title of the Session:** **Distribution Theory VII** **Chair:** **Anita Mehta** **SPEAKERS:** **Contributory:** **1. Krishnakumari.K [C102]** A New Discrete Rayleigh Distribution and Its Application in Immunogold Assay Data	**Title of the Session:** **Statistical Quality Assurance** **Chair: E. V. Gijo** **SPEAKERS** **Invited:** **1. V. Kaviyarasu [A51]** The utilization of Skip Lot Sampling plan for Minimum Angle method under Gamma-Zero Inflated Poisson Distribution.

Contributory: **2. Pulkit Srivastava [C177]** Bayesian Estimation for the Length Biased Log-Logistic Model under Joint Type II Censoring Schemes **3. Shazia Farhin [C222]** Bayesian Modelling of Exponentiated Weibull Generated family for Interval Censored Data with Rstan **4. Shivangee Misra [C225]** Bayesian Hierarchical Regression Analysis of the Indian Industries **5. P. Sivakumar [C233]** Designing of Bayesian Skip lot sampling plan Type SkSP-3 with Single sampling plan based on Zero Inflated Poisson Distribution **6. Koshti Rohan Dilip [C101]** Application of ranked set sampling in estimation of average Reid Vapor Pressure of Gasoline	**Contributory:** **2. Srishti Kumari [C241]** A Study on Neutrosophic Completely Randomised Design **3. Vaibhav V. Vasundekar [C261]** Estimation of Missing Observations for Strip Plot Design by Various Methods and Development of R Program for it. **4. Anita Mehta [C029]** Construction of Group Divisible Designs from Self-complementary BIB Designs **5. Sayantani Karmakar [C219]** Partially balanced t - designs **6. Nimna Beegum N [C157]** Bivariate Discrete Modified Weibull (BDMW) Distribution	**2. Akhalya Rajendran [C012]** A Study On T-X{Y} Family of Distributions **3. Meenu Jose [C135]** Half logistic Marshall Olkin X Family of Distributions with Properties and Applications **4. Monisha M [C143]** Alternative generalization of zero truncated negative binomial distribution using Lagrangian approach **5. M Amulya [C022]** On Inventory Model with Truncated Weibull Decay and Permissible Delay in Payments and Inflation having Time dependent Demand **6. Manoranjan Sen [C127]** Empirical Study on Efficient Estimation Techniques for Population Variance in Agriculture **7. Shibu D.S [C223]** Some aspects on mixtures of Lagrangian probability distribution	**Contributory:** **2. Mahendra Saha [C114]** Parametric inference of the process capability index Cpc for exponentiated exponential distribu-tion **3. Elbin Siby [C070]** COVID-19 in India and USA - A retrospective study **4. V.R.B.Suseela [C045]** A Hybrid Group Acceptance Sampling Plans for Life Tests Based on the Exponentiated Inverted Weibull Distribution **5. M C Chandra Prasad [C055]** CASP - CUSUM Schemes Based on Truncated Lomax Weibull Distribution **6. A.Pavithra [C163]** Evaluation of Special Type of Double Sampling Inspection Plan by Attributes Based on Marshall - Olkin Extended Exponential Distribution.
Time: 19. 50 – 20.05 hrs : **Session No.: 10MCMP5: Valedictory**			