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SOCIETY



Nigeria Statistical Society announces its:

2nd INTERNATIONAL CONFERENCE

THEME:

STATISTICAL METHODS IN BIG DATA RESEARCH: CHALLENGES & PROSPECTS IN MODELING CLIMATE CHANGE
DATE: APRIL 10 - 12, 2018

SUB THEMES

1. Statistical Theories and Methods for Big Data
2. Statistical Modeling and Applications on Climate Change
3. Big Data Analytics: Applications in Climate Change
4. Statistical Modeling of Impacts of Climate Change on Sustainable Development Goals (SDGs)
5. Applications in Mathematics, Computer Science, Economics, and other Fields of Study
3. ISSUES IN CLIMATE CHANGE AND THE NIGERIAN IMPLICATION
 Dr. Odigha Odigha
 Former Chairman, Cross River State Forestry Commission
 Calabar, Nigeria
4. Stochastic Analysis: Theories & Applications to Climate Change
 Prof. A. A. Tijani
 Dept. of Mathematics
 Ahmadu Bello University, Zaria

HOST

Prof. Zana I. Akpagu
 Vice Chancellor,
 University of Calabar
 Calabar, Nigeria

KEY NOTE SPEAKER

Prof. Nicolas Nsowa - Nuamah
 Vice Chancellor, Regent
 University College of Sc. Techn.,
 Ghana (Vice Chairman, African Union)
 Title: Current Trends in
 Climate Change Modeling

PLENARY SESSION

Prof. E. H. Etuk
 Dept. of Mathematics
 University of Science and Technology,
 Port Harcourt, Nigeria.

CALL FOR PAPERS

Intending participants are cordially requested to submit their abstracts online using the following e-mail address:
calabar2018nssconference@gmail.com
 The deadline for submission of abstracts has been extended to February 28, 2018.

Abstracts submitted after that date will not be accepted. Only authors who have registered for the conference will have their abstracts processed.

The deadline for the submission of full paper is March 9th 2018. For more information, contact the NSS website, www.nss.com.ng

INVITED PAPER

Prof. Manoranjal Pal
 Head, Economic Research Unit,
 Indian Stat. Inst., Kolkata, India.

Title: Style of Question Matters:
 An Experiment Questions on
 Gender Violence

LEAD PAPERS

STATISTICS AND POLICY
 DIRECTIONS FOR THE
 NIGERIAN ECONOMY
 Dr. Yemi Kale
 Statistician General of the Federation
 National Bureau of Statistics
 Abuja

2. GLOBAL WARMING AND
 SOLAR POWER GENERATION
 IN NIGERIA
 Prof. Stephen E. Onah
 Director/C.E.O.
 National Mathematical
 Centre
 Abuja

PRE-CONFERENCE WORKSHOP
 8th - 9th April, 2018
**THEME: CLASSIFICATION & REGRESSION
 TREES USING R: SIMULATION APPROACH**

CITY TOUR/ EXCURSION



**VENUE: CES BUILDING, UNIVERSITY OF CALABAR
 CALABAR, CROSS RIVER STATE, NIGERIA**

LOCAL CONTACT

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CONFERENCE FEES:

A. FRESH MEMBERS		(ii) Corporate Organization	N35,000
(i) Membership Registration (Professional)	N5,000	(iii) Foreign Member	\$200
(ii) Student membership	N2,500	D. PRE-CONFERENCE FEE	
(iii) Conference registration fee	N18,000	Pre-Conference fee	N15,000
(iv) Conference fee (Student)	N5,000	Arrival date for the conference is Tuesday, 9 th April, 2018. Arrival date for the pre-conference workshop is Monday, 8 th April, 2018.	
B. REGISTERED MEMBERS:		Please specify the purpose of each payment you make on your teller, e.g. Pre-conference fee: N15,000	
(i) Annual dues (Professional)	N3,000	ALL FEES ARE PAID INTO NSS ACCOUNT.	
(ii) Annual dues (Student)	NT,500		
(iii) Conference registration fee	N15,000		
early bird: from now till Feb. 5, 2018	N18,000		
(iv) Conference Registration fee (late)	N6,000		

TABLE OF ABSTRACTS

Time	ITEM
	ARRIVAL – 09 APRIL 2018
	DAY 1 – 10 APRIL 2018
	CHAIRMAN: PROF. ZANA I. AKPAGU (Vice-Chancellor, University of Calabar, Nigeria)
09.00 – 11.30	OPENING CEREMONY AND KEYNOTE ADDRESS BY: PROF. NICOLAS NSOWA-NUAMAH (Vice-Chancellor, Regent University College of Sc. & Tech., Ghana & Vice-Chairman, African Union)
11.30 – 12.00	TEA BREAK
	INVITED PAPERS:
12.00 – 14.00	KEY NOTE PAPER: PROF. MANORANJAN PAL (Economic Research Unit, Indian Statistical Institute, India) INVITED SPEAKER 1: DR. YEMI KALE (Statistician General of Nigeria, National Bureau of Statistics, Abuja, Nigeria) INVITED SPEAKER 2: PROF. STEPHEN E. ONAH (Director/C.E.O., National Mathematical Centre, Abuja, Nigeria) INVITED SPEAKER 3: PROF. S. U. GULLUMBE (Federal University, Birninkebi, Kebi State, Nigeria) INVITED SPEAKER 4: DR. ODIGHA ODIGHA (Former Chairman, Cross-River State Forestry Commission, Calabar) INVITED SPEAKER 5: PROF. A. A. TIJJANI (Former Dean, Faculty of Physical Sciences, Ahmadu Bello University, Zaria) INVITED SPEAKER 6: PROF. E. H. ETUK (Dept. of Mathematics, University of Science & Tech., Port-Harcourt, Nigeria)
14.00 – 15.00	LUNCH BREAK
	Group 1
	Group 2
	Group 3
	Group 4
Chairman	
15.00 – 17.15	<p>A1 On the Properties and Applications of New Odd Generalized Exponential-Exponential Distribution <i>B. Abba, I. Abdullahi, A. Yahya</i></p> <p>B1 Generalized Odd Generalized Exponential-Exponential Distribution: Its Properties and Applications <i>B. Abba, I. Abdullahi, A. Yahya</i></p> <p>C1 Modeling the Effects of Weather and Climate on the Spread of Black Pod Disease among Cocoa in Nigeria: A MCMC Approach <i>T. M. Adegoke, J.O. Fatokun, G.K. Adegoke, W. B. Yahya</i></p> <p>D1 Demographic Analysis Estimate on Population and Its Effects on Unemployment Rate in Katsina <i>A. Ysir, U. Nura</i></p>
	<p>A2 Theoretical Analysis of Kumaraswamy New Weighted Exponential Distribution <i>U.K. Abdullahi, J.Y. Falgore, B. Abba</i></p> <p>B2 Modelling Volatility in Exchange Rate of Naira to Dollar under Different Error Innovations <i>T.F. Agbowuro, W. B. Yahya</i></p> <p>C2 Bayesian Multiple Change-point Analysis with Application to Air Temperature and Rainfall of Ibadan Metropolis: A MCMC Approach <i>T.M. Adegoke, W.B. Yahya; K.O. Obisesan, G.K. Adegoke</i></p> <p>D2 The Impact of Dividend Payout and Sales Growth Rate on Shareholders' Value of Listed Industrial Goods Firms in Nigeria <i>A. I. Isah</i></p>
	<p>A3 Comparative Study of Some Numerical Iterations Using Zero Truncated Poisson Distribution <i>T.M. Adegoke, G.K. Adegoke, H.K.</i></p> <p>B3 Logistic Growth Modeling and Forecasting of Nigeria's Population Growth <i>N. S. Agog, S.S. Bako, H. Dogo, B.</i></p> <p>C3 Regime and Order Selection for SETAR Model in Fitting and Forecasting Nonlinear Time Series Stationary Data Structure</p> <p>D3 Empirical Assessment of Selected Financial Indicators and Nigeria Gross Domestic Product <i>C.K. Acha, C. Umezurike</i></p>

	<i>Oduwole, A.M. Yahya</i>	<i>Usman, J.Y. Kajuru</i>	<i>I. Akeyede, A.M. Babagana, I.M. Saleh</i>	
	A4 Bayesian Posterior Estimates of an Exponential Distribution <i>T.M. Adegoke, G.K. Adegoke, A.M. Yahya, K.T. Uthman, A.D. Odigie</i>	B4 Box-Jenkins and State Space Approaches: A Comparison of Models Forecasting Performance in Finance <i>O.D. Adebisi, I.J. David, C.C. Eleke, U.E. Awa</i>	C4 Evaluating Extreme Values of a Moving Average Process <i>S.S. Bako</i>	D4 A Study of Interactions between Some Selected Economic Variables and their Implications on Nigerian Economy <i>C.K. Acha, C.C. Amalahu</i>
	A5 Penalized Regression Techniques based on Correlation <i>I.A. Adeniyi, C.P. Ezenweke, W.B. Yahya</i>	B5 The Efficiency of Regression Type Estimator in Double Sampling Skills: Secondary School Students Enrollment Figures in Oyo State <i>S.A. Afolabi, C.G. Udombaso</i>	C5 Optimization of Traffic Flow in Estimating the Turning Movements in 5-ARM Roundabout <i>O.A. Bello, M. Shittu F.A. Oguntole, O.M. Adeninu, N. Ngator</i>	D5 A Meta Goal Programming Model with Mixed-Integer Variables: Application in Multi-Product Manufacturing Systems. <i>C.K. Acha, A.C. Iwuji</i>
	A6 Classes of Regression Estimator with Weighted and Unweighted Cum-Dual Products as Intercepts Estimators under Two-Phase Sampling <i>A. Audu, O.O. Ishaq, Y. Zakari, F. Mann</i>	B6 Investigating the Robustness of Filters for Integrated Processes in Business Cycles <i>I.O. Ajao, O.I. Shittu</i>	C6 Feature Selections in Microarray Survival Data Analysis Using Boruta Algorithm <i>K.A. Danda, W.B. Yahya</i>	D6 Statistical Analysis of Insecurity and Criminal Cases in Oyo State Nigeria <i>S.A. Afolabi, O.I. Osowole</i>
	A7 The Lehmann Type I Generalized Half Logistic Distribution <i>P.O. Awodutire, A.K. Olapade</i>	B7 Evaluating the forecast performance of SETAR model using Gross domestic product of Nigeria <i>M.O. Akintunde, G.A. Olalude, A.E. Adenipekun</i>	C7 On the Choice of Weight of a Combined Statistic of Sample Mean and Median in Mean Estimation of a Normal Distribution <i>E.O. Effanga, P.A. Ayuk, A.E. Ayu</i>	D7 Alternative Solution to the Benchmarking Problem with Economic Data <i>I.O. Ajao, F.J. Ayoola, J.O. Iyaniwura</i>
	A8 Regression-Cum-Dual to Ratio-Cum-Product Estimators in Sample Survey <i>A. Audu, O.O. Ishaq, R.V.K. Singh</i>	B8 Exchange Rate Forecasting Using Non-linear Threshold Models <i>M.O. Akintunde, G. A. Olalude, A. E. Adenipekun</i>	C8 On the Global Solar Radiation Predictive Capability using Machine Learning Algorithm <i>S.A. Ibrahim, L.O. Mustapha</i>	D8 Isolated Truncated Chain Sampling Plan (ITCSP) for Weibull Product Life Distribution <i>O.J. Braimah, P.A. Osanaiye, I.W. Edokpa, S.S. Umar</i>
	A9 Estimation of the Five Parameter Type I Generalized Half-Logistic Distribution Based on Censored Data <i>P.O. Awodutire, A.K. Olapade</i>	B9 Fractional Factorial Design on Crop Yield using Different Fertilizer Combinations <i>S.S. Akpan, O.E. Jasper</i>	C9 Identifying out of Control Signals: The Bootstrap P-value Approach <i>O. Ikpokin, I.U. Sitoko</i>	D9 Gender Inequality in the Average Consumption of Calories in India <i>P. Bhavani, M. Pal</i>
DAY 2 – 11 APRIL 2018				
Chairman	A10 Estimating Panel Data Models with Linear Heteroscedastic and Serially Correlated Disturbances <i>O.A. Ayansola, A.O. Adejumo, J.T. Olajide</i>	B10 The Impact of Distributions on Value at Risk and Expected Shortfall <i>I.E. Eruk, Y. Misa, S.U. Gulumbe, A.U. Sanda</i>	C10 A Procedure Based on Sine and the Error Function for the Numerical Approximation of Indefinite Integrals <i>D.J. Eno</i>	D10 Ratio Estimation of Teacher to Student in Junior Secondary School in Gombe L Government Area <i>A. Bello, A.U. Shellege, A. Adamu, A.M. Bakojind, G.B. Meller</i>
09.00 – 11.30				

	A11 An Alternative Method to Yates Standard Order for Generating Factorial Effects and their Treatment Combinations in a Full S^n Factorial Design <i>N.S. Dauran, A. Danbaba, R. Abubakar</i>	B11 Modeling Econometric Data with Problem of Endogeneity <i>M.K. Garba, W.B. Yahya, A.A. Osobase, O.R. Olaniran</i>	C11 Study on Lomax-Lindley Distribution with Applications to Simulated and Real Life Data <i>A. Yahaya, A. Lawal,</i>	D11 Changing Public Policy Expenditure in Namibia after Independence and Its Impact <i>U.K. De, C.P.P. Shajituda</i>
	A12 Theoretical Analysis of Topp-Leone Nadarajah Haghighi Exponential Distribution as a Life Time Distribution <i>A.U. Chukwu, A.A. Ogunde, I.O. Ajao</i>	B12 Effect of Random Micro-environmental Factors on Tumor Growth with Gompertzian Growth Model <i>I.M. Idiris</i>	C12 A Brief Historical Review of Neural Networks In Statistics <i>C.G. Udomboso, T.O. James</i>	D12 Comparative Effectiveness of Four Classes of Feeds on Livestock using a Class of Tests for Multivariate Linear Hypothesis and Independence <i>K.I. Ekerikevwe, K.A. Odior, E.P. Oruh</i>
	A13 Parameter Estimation of Nonlinear Split-Plot Design Model via Egls-Reml <i>I.J. David, O.E. Asiribo, H.G. Dikko, A. Yahaya</i>	B13 Impact of Temperature in Predicting Tropical Continental Rainfall: Granger Causality Approach <i>I.L. Kane, D. Usman</i>	C13 Climate Change Attributes based on Carbon Sequestration modeling in the implementation of REDD+ Programmes in Nigeria <i>S.O. Oyamakin, A.U. Chukwu</i>	D13 Empirical Analysis on Empowerment of Rural Tribal Khasi Women in India <i>B.N. Ghosh, D. Ghosh</i>
	A14 Estimation of Nonlinear Split-Plot Design Model Parameters via Egls-Mle <i>I.J. David, O.E. Asiribo, H.G. Dikko, A. Yahaya</i>	B14 A Univariate Time Series Autoregressive Integrated Moving Average Model for the Exchange Rate between Nigerian Naira and US Dollar <i>M.O. Nasiru, S.O. Olanrewaju</i>	C14 A Time Series Analysis of Points Scored by Arsenal Football Club in Premiership Competitions Using Descriptive and Stochastic Approaches <i>E.L. Otuonye, C. Okororie, G.C. Ibeh</i>	D14 A Mixed-Integer Lexicographic Goal Programming Model for Achieving Estimated Targets in Multi-Product Systems <i>A.C. Imuji, C.K. Acha</i>
	A15 On Four-Parameter Odd Generalized Exponential-Inverse Lomax Distribution <i>J.Y. Falgore, U.K. Abdullahi, A. Yakubu, U.A. Abubakar</i>	B15 Odd Burr III-Exponential Distribution: Its Theory and Application <i>U. Nura, U. Danda, A. Yasir</i>	C15 On the Performance of Multiple Regression, ARIMA and ARIMAX Modeling Techniques <i>O.I. Shitta, N.T. Jimoh</i>	D15 Climate Change Impact on Rice Production for Sustainable Development: A Case Study of Kebbi State <i>T.O. James, A.W. Babayemi, A.S. Abdulmuahymin, C.G. Udomboso, I. Enuk</i>
11.30 – 12.00	TEA BREAK			
Chairman				
12.00 – 14.00	A16 A Class of Regression Estimator with Cum-Dual-Product Estimator with Dual Ratio Estimator <i>T.S. Fayose, B.B. Ogunbusoye, L. Adebara</i>	B16 Study on Odd Burr III-Rayleigh Distribution Properties and Application <i>U. Nura, A.S. Damisa, A. Yasir</i>	C16 The Improved Tabular Procedure for Presenting Various Algorithms for Finding Initial Basic Feasible Solutions to Transportation Problem <i>J.E. Usen, S.S. Akpan</i>	D16 On The Impact of Tax Payers' Behaviour on Tax Compliance among Sole-Proprietors in Kaduna State <i>L. Muhammad</i>
	A17 Theoretical Analysis of some	B17 On the Application of the	C17 Theoretical Analysis of the	D17 On the Analysis of Exchange

Optimization of Traffic Flow in Estimating the Turning Movements in 5-ARM Roundabout

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ABSTRACT

In this project work, we modelled traffic data of a 5-arm roundabout and determined traffic turning movement at roundabouts based on the field data. Assumptions were made in order to simplify the model; such as no U-turns from and to the same arm of roundabout, total traffic into the roundabout is equal to total traffic out of the roundabout and traffic is homogenous. The developed model was presented in Origin-destination (O-D) matrix forms and system linear equation. Using matrix approach turning movements could be estimated for 5-arms roundabout for the indeterminate traffic stream movements when inflow and outflows for each arm of the roundabout is known together with a flow stream on one internal circulating (weaving) section between any two arms of the roundabout.

The benefit of the model to traffic flow in Omoda 5-arm roundabout in Kwara State is to minimize traffic congestion by presenting the shortest path, the model allocate routes sequentially to avoid traffic congestion at peak periods, controlling departure time and estimating number of vehicles expected to make departure per given interval.

Arm5 generate the highest traffic flow towards the roundabout, followed by arm4, then arm1, arm2 and arm3 respectively. Traffic flow leaving the roundabout was highest at arm1, followed by arm2, arm5 and arm4 respectively. The work recommends the expansion of arm1 (Kaima road) and arm5 (Ajikobi road) as they were predicted and validated by the simulated model results in agreement with field data as the highest inflow and outflow of vehicles respectively.