



04 – 08 November 2013



Finding Solutions for Africa

The Power and Impact of Statistics on Society

PROGRAMME

The South African Statistical Association (SASA) and the Department of Statistics and Operations Research at the University of Limpopo-Turfloop Campus are proud to host the 55th Annual SASA Conference that will take place on 04-08 November 2013 in Polokwane, Limpopo Province, South Africa. As SASA was established in 1953, the 2013 Conference marks the Association's 60th Anniversary.

This is the first time that a historically disadvantaged university is hosting a SASA Conference. The Conference will enhance the quality of learning for our students and open doors in the University of Limpopo's efforts to establish further collaborative work and partnerships with other institutions of higher learning and industry.

The Conference is aimed at increasing the public's mindfulness of the impact of statistics on all aspects of society, predominantly to young people, by promoting statistics as a profession.




PROGRAMME CONTENTS

MONDAY • 04 NOVEMBER 2013	3		
Registration	3		
Workshop 1	3		
Workshop 2	3		
Workshop 5	3		
Meet & Greet	3		
TUESDAY • 05 NOVEMBER 2013	4		
Registration	4		
Workshop 3	4		
Workshop 4	4		
SASA EC Meeting	4		
Meet & Greet	4		
WEDNESDAY • 06 NOVEMBER 2013	5		
Registration	5		
Opening Ceremony	5		
Plenary Session 1	5		
Briefing Session	5		
Parallel Session 1	6		
Parallel Session 2	6		
Parallel Session 3	7		
Parallel Session 3	8		
		Meetings & After Parallel Sessions	8
		SASA AGM	8
		Welcoming Function	8
		THURSDAY • 07 NOVEMBER 2013	9
		Young Statisticians Breakfast	9
		Registration	9
		Parallel Session 4	9
		Plenary Session 2	10
		Parallel Session 5	10
		Plenary Session 3	10
		Parallel Session 6	11
		Parallel Session 7	11
		Meetings & After Parallel Sessions	12
		IFCS meeting	12
		ISBASA meeting	12
		Gala Dinner	12
		FRIDAY • 08 NOVEMBER 2013	13
		Registration	13
		Parallel Session 8	13
		Plenary Session 4	14
		Closure of SASA 2013 Conference	14


MONDAY • 04 NOVEMBER 2013

08H00 - 09H00	Registration Venue: Foyer		
09H00 - 17H00	Workshop 1 Title: Small Area Estimation (SAE): Advances and Practice Presenter: Prof. Ray Chambers, NIASRA, University of Wollongong, Australia Venue: Safari Conference Centre	Workshop 2 Title: Generalized Linear Models (GLM) Presenter: Prof. Peter McCullagh, University of Chicago, USA Venue: Day Lily	Workshop 5 Title: Teaching Introductory Statistics to large classes of students in the presence of varying levels of preparation and language issues Presenter: Prof. D. North (University of KwaZulu-Natal); Mrs. F. Reyneke (University of Pretoria); Mrs. Y. Chhana (Wits University); Prof. M Lesaoana (University of Limpopo) plus special guest Prof. James J. Cochran (Louisiana Tech University, USA), Official SASA Visitor, 2013 on the panel. Venue: Chapel
	SAE: 1 st Session	GLM: 1 st Session	SASAECW: 1 st Session
09H00 - 11H00	 Venue: Warrior		
11H00 - 11H30			
11H30 - 13H00	SAE: 2 nd Session	GLM: 2 nd Session	SASAECW: 2 nd Session
13H00 - 14H00	 Venue: <i>Buttery Restaurant</i>		
14H00 - 15H30	SAE: 3 rd Session	GLM: 3 rd Session	SASAECW: 3 rd Session
15H30 - 16H00	 Venue: Warrior		
16H00 - 17H00	SAE: 4 th Session	GLM: 4 th Session	SASAECW: 4 th Session
From 17H30	Meet & Greet Venue: Pool Lapa		
Monday Evening	End of Workshop 1, 2 & 5 Arrival & Registration in the Evening, Accommodation Arrangements		

TUESDAY • 05 NOVEMBER 2013

08H00 - 09H00	Registration Venue: Foyer	
09H00 - 17H00	Workshop 3 Title: Experiment Design, Modeling and Optimization (EDMO) using SAS/JMP Presenter: Dr. Bradley Jones, SAS Institute, North Carolina Venue: Safari Conference Centre	Workshop 4 Title: Doctoral Colloquium (DC) Presenter: Prof. James Cochran, Louisiana Tech University, USA Venue: Chapel
09H00 - 11H00	EDMO: 1 st Session	DC: 1 st Session
11H00 - 11H30	 Venue: Warrior	
11H30 - 13H00	EDMO: 2 nd Session	DC: 2 nd Session
13H00 - 14H00	 Venue: Buttery Restaurant	
14H00 - 15H30	EDMO: 3 rd Session	DC: 3 rd Session
15H30 - 16H00	 Venue: Warrior	
16H00 - 17H00	EDMO: 4 th Session	DC: 4 th Session
17H00 - 19H00	SASA EC Meeting Venue: Day Lily	
From 17H30	Meet & Greet Venue: Club House	
Tuesday Evening	End of Workshop 3 & 4	

WEDNESDAY • 06 NOVEMBER 2013

07H30 - 08H50	<h3 style="margin: 0;">Registration</h3> <p style="margin: 0;">Venue: Foyer</p>	
09H00 - 10H30	<h3 style="margin: 0;">Opening Ceremony</h3> <p style="margin: 0;">Chair: SASA President – Dr. Roelof Coetzer Venue: Safari Conference Centre</p>	
09H00 - 09H05	Welcoming:	Dr. Roelof Coetzer
09H05 - 09H15	Opening:	Prof. NM Mokgalong, Vice-Chancellor & Principal, University of Limpopo
09H15 - 09H45	Presidential address:	Dr. Roelof Coetzer (Announcement by Prof. Paul Mostert)
09H45 - 10H15	Awards:	<p>SAS awards for best honours projects: Ms. Hannah Gerber (hand over by Mr. Murray de Villiers)</p> <p>STATSSA awards for best postgraduate papers: Prof. Delia North</p> <p>Sichel medal: Prof. Paul Fatti</p> <p>Fellowship and Honorary Members: Prof. Gary Sharp</p>
10H15 - 10H25	Platinum Sponsor Address:	SAS: Mr. Murray de Villiers
10H25 - 11H05	<h3 style="margin: 0;">Plenary Session 1</h3> <p style="margin: 0;">Title: Survival Models with Health Monitoring Presenter: Prof. Peter McCullagh Chair: Prof. Kamanzi-wa Binyavanga Venue: Safari Conference Centre</p>	
11H05 - 11H35	 Venue: Warrior	
11H40 - 12H10	<h3 style="margin: 0;">Briefing Session</h3> <p style="margin: 0;">Title: Academic Statistics in Crisis: NRF addressing vulnerable disciplines Presenter: Dr. Andrew Kaniki Chair: Dr. Roelof Coetzer Venue: Safari Conference Centre</p>	

Parallel Session 1

@ 12H20 - 13H00

Poster Presentations

	Chair: Venue:	Delia North Safari Conference Centre	Roelof Coetzer Day Lily	Khehla Moloi Chapel	Negussie Yibas Garden	Paul Mostert Georgian
12H20 - 12H40	Title: Presenter:	Data Curation: A Means Towards an End Lucia and Lotter	On-line Multivariate Statistical Process Monitoring and Evaluation of Batch Processes Andre Mostert	Mapping annual exceedance frequency of the PM10 air quality standard – comparing kriging and generalized linear spatial models Sibusisiwe Khuluse	Understanding our people: A journey through Mangaung: Findings from Census 2011 Sthembile Nzuza	Application of joint modeling of malaria RDT result, use of mosquito nets and use of indoor residual spray Dawit Ayele
12H40 - 13H00	Title: Presenter:	Assessment of Orphaned and Vulnerable children in Limpopo 2012 Reshoketswe Mokobane	Time adaptive PCA monitoring Gerhard Koekemoer	Labour market outcomes of South African youth aged 15-24 years Evidence Gaogopolwe		The partial least squares biplot for generalized linear models Opeoluwa Oyedele
13H00 - 14H00	Venue: Buttery Restaurant					

Parallel Session 2

@ 14H00 - 15H40

	Stream: Chair: Venue:	Applied Statistics Sonali Das Safari Conference Centre	General Alphonse Amey Day Lily	Forecasting Sagaren Pillay Chapel	Biostatistics/ General Asanda Fotoyi Garden	Applied Statistics/ Young Statisticians Agnes Matope Georgian
14H00 - 14H20	Title: Presenter:	Using a multivariate diffusion model to perform inference in ecology Etienne Pienaar	Modeling Severity of Tuberculosis as a multiple cause of death in South Africa N. Forchheh, K. Setlhare	The Long Run Relationship between Exports and Imports in South Africa: Evidence from cointegration analysis Sagaren Pillay	Attitude Survey Analysis Nombuso Zondo	Using statistical analysis to identify defects that cause high financial losses Zanele Mpanza
14H20 - 14H40	Title: Presenter:	Temporal causality between house price and output in the US: A bootstrap rolling window approach Sonali Das	Multiple causes of death models for HIV/AIDS and related mortality in South Africa in 2006 and 2007 A.K.A. Amey, N. Forchheh and K. Setlhare	Volatility Modeling of Real Gross Domestic Product growth Rate in South Africa for the period of 1960-2012 Hulisani Constance Maremahae	Competing risks in time-to-event data Nonhlanhla Yende-Zuma	Factors affecting levels of knowledge on pre-mature births among women in Malawi Elias Mwakilama and Agnes Matope
14H40 - 15H00	Title: Presenter:	Investigating the goodness-of-fit of ten candidate distributions and estimating high quantiles of extreme flood heights Daniel Maposa	Feasible generalised least squares estimators in serially correlated error models from an asymmetry viewpoint Samuel Nakale	Time Series Forecasting Using Harmonically Coupled SARIMA Models: Application to Solar Radiation data Edmore Ranganai	Spatial modelling of HIV/AIDS and Tuberculosis prevalence in South Africa Annah Managa	On specification of maximum lag-length for unit root testing of non-stationary time series data Oluokun Kasali Agunloye

Parallel Session 2 @ 14H00 - 15H40 (Continues...)

	Stream:	Applied Statistics	General	Forecasting	Biostatistics/ General	Applied Statistics/ Young Statisticians
	Chair:	Sonali Das	Alphonse Amey	Sagaren Pillay	Asanda Fotoyi	Agnes Matope
	Venue:	Safari Conference Centre	Day Lily	Chapel	Garden	Georgian
15H00 - 15H20	Title:	A Method to Measure Choking in Cricket	Spatial and Temporal Patterns of Cause-Specific Mortality in a HIV and TB Endemic South Africa	A Statistical analysis of monthly temperature using Box-Jenkins' SARIMA methodology and a General Linear Model Approach	On balanced modified systematic sampling in the presence of linear trend	Statistical modelling of diarrhea disease episodes in Namibian children
	Presenter:	Hoffie Lemmer	Samuel Manda	Farikayi Mutasa	Llewellyn Reeve Naidoo and Delia North	Lillian Pazvakawambwa, Isak Neema and Nelago Indongo
15H20 - 15H40	Title:	The Distribution of P-values in Multivariate Analysis of Variance with $n < p$	Mentoring high school learners in research projects	Markov Chain Approach on the Behavior and Patterns of Rainfall in Filabusi, Matopos and Bulawayo	Revisions Analysis of Short-Term Economic Indicators	Statistical Modelling of adolescent pregnancy in Namibia
	Presenter:	Francois Steffens	Eeva Rapoo	Ephifania Geza	Asanda Fotoyi	Mumbango T. and Pazvakawambwa L.
15H40 - 16H10	Venue: Warrior					

Parallel Session 3

@ 16H15 - 17H35

	Stream:	Applied Statistics	Biometry	Classification and Data Analysis	Young Statisticians	General
	Chair:	Sebnem Er	Legesse K. Debusho	Edward Chiyaka	Florance Matarise	Kamanzi-wa-Binyavanga
	Venue:	Safari Conference Centre	Day Lily	Chapel	Garden	Georgian
16H15 - 16H35	Title:	A Composite Paired Comparisons Model for Estimating Missing Ambient Temperature Data in RSA	Using Quality Control Charts for monitoring laboratory processes in the food industry	The Analysis of Distance of Grouped Data with Categorical Variables: Categorical Canonical Variate Analysis Biplots	Start-up Designs In Medical Trials	McCullagh Index Notation: PART I
	Presenter:	Morne Rowan Sjolander	Nicolene Thiebaut	Niel Le Roux	Hassan Sadiq	Kamanzi-wa-Binyavanga
16H35 - 16H55	Title:	Modelling of Extreme Minimum Rainfall Using Generalised Extreme Value Distribution: A Case Study of Zimbabwe	Efficient response-surface designs with unknown blocks sizes	On image analysis of gold nanoparticles	Parameter estimation for the N•IG distribution	McCullagh Index Notation: PART II
	Presenter:	Delson Chikobvu and Retius Chifurira	Legesse Kassa Debusho and Gamu Chibayambuya	Inger Fabris-Rotelli	Jaco Visagie	Kamanzi-wa-Binyavanga
16H55 - 17H15	Title:	Path to Development via Gender Equality: A Structural Equation Modelling of Female Human Capital Factors	Partially confounded 2 ^k factorial designs for two-color microarray experiments	Clustering of housing and household patterns using the 2011 Population Census	Polygon detection in images	Comparison of Data Mining and Spatial Techniques: An Application to Spatially Correlated Large Scale Property Data
	Presenter:	Sebnem Er	Legesse K. Debusho and Dibaba B. Gemechu	Nontembeko Dudeni-Tlhone, Jenny Holloway, Sibusisiwe Khuluse, and Renee Koen	Magnus van Niekerk and Inger Fabris-Rotelli	T.J Hine, S.M. Millard and F.H.J Kanfer

Parallel Session 3

@ 16H15 - 17H35

	Stream:	Applied Statistics	Biometry	Classification and Data Analysis	Young Statisticians	General
	Chair:	Sebnem Er	Legesse K. Debusho	Edward Chiyaka	Florance Matarise	Kamanzi-wa-Binyavanga
	Venue:	Safari Conference Centre	Day Lily	Chapel	Garden	Georgian
17H15 - 17H35	Title:	De-interleaving periodic point processes with many missing values	A-optimal row-column designs for two-colour microarray experiments using linear mixed models	Stochastic Modelling of the Hereditary Transmission of Type 2 Diabetes in Family Networks	South African Household Survey Data: An Unbiased View on Narrowing the Gap Between Racial Groups	Efficiency of the CPC estimator in modelling the covariance structures of several populations
	Presenter:	Chris Koen	Dibaba B. Gemechu, Legesse K. Debusho and Linda M. Haines	Edward Chiyaka	Tsiresy Pierre Bernard	Theo Pepler

From 17H45

Meetings & After Parallel Sessions

SASA AGM

@ 17H45 - 18H45

Venue: Safari Conference Centre

Welcoming Function

@ 19H00

Venue: Pool Lapa

End of Day

Wednesday Evening

THURSDAY • 07 NOVEMBER 2013

07H30 - 08H50

Young Statisticians Breakfast

Venue: Club House

07H45 - 08H50

Registration

Venue: Foyer

Parallel Session 4

@ 09H00 - 10H20

	Stream:	Applied Statistics	General	Classification and Data Analysis	Young Statisticians	General
	Chair:	Hildegard Erasmus	James Allison	Legesse K Debusho	Inger Fabris-Rotelli	Diana T Gasa
	Venue:	Safari Conference Centre	Day Lily	Chapel	Garden	Georgian
09H00 - 09H20	Title:	Modified Phase I Control Charts for Time Between Events	Some new properties of a Bernstein estimator of a copula density	Application of Genetic Algorithms to Unidimensional Scaling	Statistical issues arising in the setting of wildlife research	Use of statistical modelling in demand forecasting
	Presenter:	Nirpeksh Kumar	Jan Swanepoel	Sugnet Lubbe	Christine Kraamwinkel and Inger Fabris-Rotelli	Leslie Simbisai Madzivanyika
09H20 - 09H40	Title:	Estimating kernel parameters in support vector regression	Some new results on the empirical copula estimator with applications	Nearest hypersphere classification in comparison to traditional and other modern classification techniques	Modelling of Correlated Binary Data	Impacts of organic agriculture on livelihoods improvement: A Case of Mwanza ward, Goromonzi District in Mashonaland East Province
	Presenter:	Morne Lamont	Jan Swanepoel	Stephan van der Westhuizen	Sandra Sepato, Legesse Kassa Debusho and Gudeta W. Sileshi	Alec. S. Rushwaya
09H40 - 10H00	Title:	Prediction accuracy estimation with applications to classical linear regression, regression trees and support vector regression	The probability weighted characteristic function and goodness-of-fit testing	Regularised Iterative Multiple Correspondence Analysis in Multiple Imputation	Unsupervised Learning: Modelling Customer Behaviour Using Artificial Neural Networks	The effects of varying temperature and pressure on the production of rubber conveyor belt covers
	Presenter:	Hildegard Erasmus	James Allison	Johané Nienkemper and Michael von Maltitz	D Shiel and L Fletcher	Constantine Ndava Mupondo
10H00 - 10H20	Title:	Analyzing HIV/Aids Complex Survey Data	A new test for symmetry based on the probability weighted characteristic function	Analysis of Extreme Climate Events in South Africa	Circular Statistical Analysis of GPS-derived telemetry elephant movement data	The feasibility of surpassing the 2012 ZIMRA revenue collection target
	Presenter:	Amos Chinomona	James Allison	Tadele A Diriba, Legesse K Debusho, Joel Botai and Abubeker Hassen	Robert Mutwiri	Diana T Gasa

10H20 - 10H50



Venue: Warrior

10H55 - 11H35

Plenary Session 2

Title: Statistics2013 Honorary Plenary Speaker: Celebrating the International Year of Statistics and Considering Statistics' Role in the Analytics World

Presenter: Prof. James Cochran

Chair: Prof. 'Maseka Lesaoana

Venue: Safari Conference Centre

Parallel Session 5

@ 11H40 - 13H00

	Stream:	Applied Statistics	General	Bayesian Statistics	Young Statisticians	Industrial Statistics/ Forecasting
	Chair:	WD Schutte	Chantelle Clohessy	Michael Johan von Maltitz	T Darikwa	Ozias Ncube
	Venue:	Safari Conference Centre	Day Lily	Chapel	Garden	Georgian
11H40 - 12H00	Title:	Some Mathematical and statistical Characteristics of Bells and Carillons	Beran Estimator for the Weibull-Type Tail Coefficient	Bayesian Estimators of Some Reliability Parameters in a Compound Rayleigh Model	Time Series modeling of road fatalities in South Africa from 1930 to 2013	Estimation of the in-situ mean from sampling data in a selective mining operation
	Presenter:	Pieta van Deventer, Tertius de Wet and Jef Teugels	Tchilabalo Kpanzou	Paul Mostert	Modupi Peter Mphekgwana and T Darikwa	L. Paul Fatti, Craig Morgan and Richard Minnitt
12H00 - 12H20	Title:	Spatial Joint Disease Modeling and Mapping with Application to HIV and HSV-2	Speeding up simulation studies using multiple cores	Bayesian Model Comparison for Grouped Data	Understanding Our People in eThekweni Metropolitan Municipality: A Journey Through Census 2011	An investigation of supply chain competitiveness: A case study of a mining equipment manufacturer in South Africa
	Presenter:	Ngesa Oscar	Sean van der Merwe	Lizanne Raubenheimer and Abrie J. van der Merwe	Kgomotso Valencia Dinoko and Evidence Gaogopolwe	Ozias Ncube
12H20 - 12H40	Title:	Nonparametric estimation of the off-pulse interval(s) of a pulsar light curve	A Brief Comparison of Functional Data Analysis and Time Series Analysis	A Simulation Approach for Detecting Outliers in Linear Models	Understanding our people: A journey through Census 2011 (The Western Cape Province)	Stochastic analysis of a two unit warm standby system with preparation time for repair
	Presenter:	WD Schutte	Siphumlile Mangisa	Abrie J. van der Merwe and Piet C. N. Groenewald	Gomolemo Teo, Sthembile Nzuza, Ros Hirschowitz and Sharthi Laldaparsad	V.S.S Yadavalli & M.E. Khunoana
12H40 - 13H00	Title:	The effect of market dynamics on the market penetration of a new product in social networks	Comparison between non-parametric and parametric regression techniques used for evaluating sound levels of micro wind turbines	Posterior Predictive p-values in SRMI	A comparison study of statistical methods for analysing high dimensional and highly correlated data	Forecasting the US Real Private Residential Fixed Investment using Large Number of Predictors
	Presenter:	Thandulwazi Magadla	Chantelle Clohessy	Michael Johan von Maltitz	Augustine Twum	Rangan Gupta

13H00 - 14H00

Venue: Buttery Restaurant

Plenary Session 3

Title: Spatio-Temporal Modelling of Rainfall

Presenter: Prof. Raymond Chambers

Chair: Prof. 'Maseka Lesaoana

Venue: Safari Conference Centre

14H00 - 14H40

Parallel Session 6

@ 14H45 - 15H45

	Stream:	Applied Statistics	General	Educational Statistics	Financial Statistics	Biostatistics
	Chair:	MM Motshwane	Marien Graham	Negussie Yibas	Mbulaheni Nthangen	Lieketseng Masenyetse
	Venue:	Safari Conference Centre	Day Lily	Chapel	Garden	Georgian
14H45 - 15H05	Title:	Empirical Analyses of Extreme Value Models for the South African Mining Index	Signed-Rank Control Charts with Variable Sampling Intervals	The flipped classroom: Evaluating the impact of inverting traditional teaching methods	Compiling of the Annual Financial Statistics (AFS) in Statistics South Africa	Comparisons of Predictive Values of Medical Diagnostic Tests for Paired Designs
	Presenter:	K. Chinhamu, C-K. Huang and C-S. Huang	Margarethe Coelho	Fransonet Reyneke	Mbulaheni Nthangeni and Patrick Naidoo*	Catherine Connolly and Vinod Patel
15H05 - 15H25	Title:	Intuitive Regression to Evaluate Business Process Optimisation	A Stress-strength Model with Stochastically Decreasing Strength and External Shocks	Statistics at school level is about to hit a crisis ... what can we do?	Censored Regression Techniques for Credit Scoring: A case study for the Commercial Bank of Zimbabwe (Bulawayo)	Longitudinal Meta-Analysis of Multiple Covariate Effects
	Presenter:	Gezani Richman Miyambu, SM Seeletse and MM Motshwane	Maxim Finkelstein	Delia North	Precious Mdlongwa	Alfred Musekiwa
15H25 - 15H45	Title:	Factors associated with tuberculosis deaths in South Africa	On Phase II nonparametric CUSUM exceedance control charts for unknown location	Analysis of student enrolment and graduation: The case of University of Limpopo	Modelling Loss Given Default (LGD) for a Personal Loan Portfolio: A Case Study of the MBCA Bank	Estimation Techniques for Joint Modelling of Longitudinal and Recurrent Events data
	Presenter:	Tsireledzo Ranwaha and Mokowe R Makwela	Marien Graham	Negussie Yibas	Isabel Linda Moyo	Lieketseng Masenyetse
15H45 - 16H15						
Venue: Warrior						

Parallel Session 7

@ 16H20 - 17H40

	Stream:	Applied Statistics	General	Educational Statistics	Financial Statistics/ Forecasting	Biostatistics
	Chair:	C-K. Huang	SM Seeletse	Philimon Nyamugure	Kondwani Kampenya	Khangelani Zuma
	Venue:	Safari Conference Centre	Day Lily	Chapel	Garden	Georgian
16H20 - 16H40	Title:	Ridge Regression as a Remedy to Collinearity	Modified improved probability limits design for synthetic c control chart	Comparative analysis of first-year Bachelor of Science student performance in selected modules	On a Bayesian Single Regime GARCH(1,1) Model for Financial Market Volatility: An Application to the Johannesburg Stock Exchange	HIV epidemic in South Africa: a comparison of HIV epidemic patterns of two extreme provinces in South Africa
	Presenter:	Makhala Khoeli	Sandile Shongwe	Tshepo Matsose and Solly Matshonisa Seeletse	Kondwani Kampenya	Khangelani Zuma

		Parallel Session 7 @ 16H20 - 17H40 (Continues...)				
		Applied Statistics Chair: C-K. Huang Venue: Safari Conference Centre	General SM Seeletse Day Lily	Educational Statistics Philimon Nyamugure Chapel	Financial Statistics/ Forecasting Kondwani Kampenya Garden	Biostatistics Khangelani Zuma Georgian
16H40 - 17H00	Title:	Applied Statistics: Overdraft Propensity Model	Mann-Whitney control charts with supplementary runs rules	Analysis of factors influencing first year university undergraduate performance in selected pure mathematics courses at National University of Science and Technology- Zimbabwe	Extreme quantile estimation for Pareto-type distributions using small samples	Estimating the Selective Advantage of HIV Mutants from Longitudinal Allele Frequency Data
	Presenter:	Unathi Mlaba	Jean-Claude Malela Majika	Amon Masache	Kevin Panman	Miguel Lacerda
17H20 - 17H40	Title:	Modeling the South African Mining Index with Generalized Hyperbolic Distributions	Data that Makes a Difference	A Statistical analysis of the factors affecting the performance of students in Mathematics at ordinary level in Zimbabwe	Statistical Time Series Forecasting Models for Impact of Climate Change on the Usage of Electricity in South Africa	A nonlinear mixed-effects model for multivariate longitudinal data with partial dropout with application to HIV disease dynamics
	Presenter:	K. Chinhamu, C-K. Huang*, M. J. Hammujuddy and C-S. Huang	Elias Makonko	Philimon Nyamugure and Peter Chimwanda	Thandekile Nyulu	Artz George Luwanda
From 17H45	Meetings & After Parallel Sessions					
Thursday Evening	IFCS meeting @ 17H45 - 18H45 Venue: Day Lily					
	ISBASA meeting @ 17H45 - 18H45 Venue: Chapel					
	Gala Dinner @ 19H00 for 19H30 Venue: Bushwillow					
	Programme Director: Mr Risenga Maluleke (Stats SA), Keynote Speaker: Mr Trevor Manuel					

FRIDAY • 08 NOVEMBER 2013

Registration

Venue: Foyer

Parallel Session 8

@ 09H10 - 10H50

07H30 - 09H00		Registration					
		Venue: Foyer					
		Parallel Session 8					
		@ 09H10 - 10H50					
		Applied Statistics		General	Educational Statistics/ Biometry/ Forecasting	Bayesian Statistics/ Official Statistics	General/ Applied Statistics
		Chair: Gaetan Kabera		Robert King	Chisara Peace Ogbogbo	Samuel Manda	Caston Sigauke
		Venue: Safari Conference Centre		Day Lily	Chapel	Garden	Georgian
09H10 - 09H30	Title:	Algebraic construction of locally D-optimal designs for the binary logistic model with several explanatory variables		Maximum likelihood estimation for parameter structures in multivariate normal samples	Estimating the Limpopo GDP using the Barometer	A Semiparametric Stratified Survival Model for Timing of First Birth in South Africa	General and Universal Jarque-Berra tests and application
	Presenter:	Gaetan Kabera		Nico Crowther	Jaco Mostert	Samuel Manda	Oumar Thiam and Gane Samb Lo
09H30 - 09H50	Title:	Factors influencing vehicle insurance status		MLE for parameter structures in the seemingly unrelated regressions model	Using a zero-inflation model to identify factors that can be used to predict research output at the University of KwaZulu Natal	Introduction to Functional Data Analysis (FDA)	A doubled indexed functional moment estimator and hill process and applications
	Presenter:	Kontswi D Tshabalala and Mokowe R Makwela		Nina Strydom	Michael Murray	Rene Essomba	Modou Ngom and Gane Samb Lo
09H50 - 10H10	Title:	Statistical-event Approach to the Development of Kolmogorov Equations: An Epistemological Re-visit of Queue Optimisation Models		New limits for the (Xbar-R) chart scheme	Analysis of optimal return on investment in some Niger Delta oil field projects: Using subordinated lévy price process	Selecting Model and Benchmark Variables in Calibration Estimation in Sample Surveys with Nonresponse	CFA and SEM using different statistical packages
	Presenter:	Venant Mutabihirwa		Mandla Diko	Chisara Peace Ogbogbo	Bernardo Rota and Thomas Laitila	Lizelle Fletcher
10H10 - 10H30	Title:	Effect of blocking on the precision of some agronomic experiments		A smooth test of goodness-of-fit for the generalized lambda distribution	On differences between Common Singular Spectrum Analysis (CSSA) and Multi-channel Spectrum Analysis (MSSA)	Modeling the Nigerian inflation process using the Bayesian model averaging (BMA)	A comparative analysis of dynamic regression models to daily peak load forecasting in South Africa
	Presenter:	Mfoniso Umoren		Robert King	Daan Nel, Lienki Viljoen and Sarel Steel	Olawale Akanbi	Caston Sigauke and Delson Chikobvu
10H30 - 10H50	Title:	An accurate method for estimating the sufficient parameters of a univariate Gaussian density function		Robust Estimation of the Long Memory Parameter "d" using Modified Geweke Porter-Hudak procedures	Mixed model with spatial variance – covariance structure for accommodating of local stationary trend and its influence on multi-environmental crop variety trial	Modelling residential electricity usage within the eThekweni Municipal area	Risk factors of Malaria Incidence in Ghana: A Case Study of Obuasi Government Hospital
	Presenter:	Cliff Richard Kikawa		Florance Matarise	Asnake Negash	Samantha Reade	Alexander Boateng, Nana Kenna Frempong
10H50 - 11H20		Venue: Warrior					

Plenary Session 4

Title: Designed Experiments that Changed the World

Presenter: Dr. Bradley Jones

Chair: Roelof Coetzer

Venue: Safari Conference Centre

Closure of SASA 2013 Conference

By: Roelof Coetzer


Chair: Prof. Paul Mostert

Venue: Safari Conference Centre

11H25 - 12H05

12H05 - 13H00

13H00 - 14H00


Venue: *Buttery Restaurant*

*Thank you • Dankie • Ke a Leboga
• Ke a leboha • Siyabonga •
Inkomu • Ndo livhuwa • Enkosi •
Ngiyabong*