First General Meeting of the IASSL

The inaugural general meeting of the IASSL was held on Saturday, 29th October 2011 at the auditorium of the OPA. The ‘Rules’ of the IASSL were approved and the following members were selected unanimously for first Executive Council of the IASSL:

President: Mr. Palitha Sarukkali, Vice President: Dr. B.L. Peiris, Secretary: Dr(Mrs). R. Abeynayake, Asst. Secretary: Dr. R.D. Yapa, Treasurer: Mr. E.A.R.D. Bandara, Asst. Treasurer: Mrs. Padma Yatapana, Editor: Dr. Sarath Bannehaka, Chairperson/ Academic Training Committee: Dr. W.N. Wickramasinghe, Chairperson/ Research & Development Committee: Prof(Mrs).R. Sooriyarachchi, Chairperson/ Statistics Popularization Committee: Mrs. D.A.B.N. Amarasekara, Executive Council Members: Dr(Ms). C.D. Tilakaratana, Prof. S. Samita, Dr. T.S.G Peiris, Prof. R.O. Thattil, Mr. R.A.B. Abeygunawardana, Mr. R. Jayaratna.

The International Statistics Conference, 2011

The 4th International Statistics Conference will be held at the Waters Edge, Battaramulla, Sri Lanka from 28 to 30 December 2011. The theme of the conference is ‘Statistical Concepts and Methods for the Modern World’. The conference is organised by the Applied Statistical Association of Sri Lanka (now IASSL) jointly with the School of Mathematics and Statistics, The University of Sydney, Australia and Department of Statistics, Faculty of Science, The University of Colombo, Sri Lanka.

Minister of Technology and Research Prof. Tissa Vitharana will be the Chief Guest. Professor C.R. Rao (Pennsylvania State University) and Dr. Nancy Geller (President of the American Statistics Association for the year 2011) will deliver keynote addresses.

Dr. B.L. Peiris, Mr. Palitha Sarukkali and Dr(Mrs). R. Abeynayake at the Head table(left to right)

Prof. Tissa Vitharana, Prof. C.R. Rao and Dr. Nancy Geller (left to right)
IASSL Launches a New Website
www.iappstat.lk

The new website www.iappstat.lk of the IASSL was launched at the inaugural meeting on 29th October 2011 by Prof. R.O. Thattil. The website was designed by Dr. Dharshana Yapa of the university of Peradeniya. It is not fully functional yet. When completed it will have a number of attractive features beneficial to the members and other public.

The objectives of the website are:

- to promote and assist the advancement of Applied Statistics for furtherance of research, development, education, training and extension,
- to undertake and/or collaborate in the preparation publication and dissemination of useful information pertaining to Applied Statistics by means of seminars, lecture series and articles in a Journal edited and published under the name of "Sri Lankan Journal of Applied Statistics" to foster the training of research workers.
- to undertake research in the area of Statistics with the object of improving experimental techniques, statistical methods and data analysis.
- to co-operate with governmental and non-governmental organizations and national and international institutes engaged in work related to statistics in order to promote research, development, education, training and extension.
- to promote professional interests of the members of the Institute.

IASSL plans to start a Diploma Program in Applied Statistics

The Academic Training Committee of the IASSL has prepared a proposal for a Diploma Program in Applied Statistics. The objective is to introduce a one-year full time Diploma in Applied Statistics especially targeting those from middle income groups who are unable to enter a state university and unable to go abroad for higher studies. The diploma will stand on its own as an independent qualification giving students confidence with at least certain applications in real world problems, and at the same time will stand as a pre-requisite to qualify to the second level, i.e. higher diploma level.

The program will be started after obtaining necessary approvals and acquiring necessary facilities.

Calling Papers for SLJAS

Eleven volumes of the Sri Lankan Journal of Applied Statistics have been published by the Applied Statistics Association of Sri Lanka until 2010. It will be continued by the IASSL from volume 12 in 2011, which will be a special issue carrying the selected papers from the International Statistics Conference 2011.

The main purpose of the journal is to publish results of original work on the applications of Statistics and on theoretical and methodical aspects of Statistics. The journal also welcomes critical reviews including conceptual discussions, opinions and book reviews. Applications of Statistics in the area of Agriculture & Forestry, Medical, Dental and Veterinary Sciences, Natural, Physical and Social Sciences fall within the scope of the journal.

SLJAS is a truly a refereed journal. Each paper is reviewed by three reviewers who are experts in the particular subject area of the paper. Those papers recommended by at least two reviewers are accepted for publication. Review process is carried out completely independently and anonymously. It is expected to publish two volumes per year from 2012.

Research papers are now invited for the volume 13 which will be published in 2012. The deadline for the manuscripts is 31st of March 2012.

The members of the new editorial board of the SLJAS are Dr. B.M.S.G. Banneheka (University of Sri Jayewardenepura), Dr. W.N. Wickramasinghe (University of Colombo), Dr. Dilhari Atygala (University of Colombo) and Dr. T. Siva (University of Peradeniya)

Just for Fun
(Extracted from the WWW)

A statistics major was completely hung over the day of his final exam. It was a True/False test, so he decided to flip a coin for the answers. The stats professor watched the student the entire two hours as he was flipping the coin...writing the answer...flipping the coin...writing the answer. At the end of the two hours, everyone else had left the final except for the one student. The professor walks up to his desk and interrupts the student, saying: "Listen, I have seen that you did not study for this statistics test, you didn't even open the exam. If you are just flipping a coin for your answer, what is taking you so long?"

The student replies bitterly, as he is still flipping the coin: "Shhh! I am checking my answers!"

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ISC 2011: At a Glance

Key Note Addresses:

- Importance Sampling and Cross-entropy with Applications to Problems of Large Deviations and Optimization Problems
- Confirmatory Clinical Trial Designs for Biomarkers

Special Guest Lectures:

- Saddlepoint Approximations for Multiparameter Permutation Tests
- Two-Sided Bayesian and Frequentist Tolerance Intervals: General Asymptotic Results with Applications
- U-statistics, Trimming and Robust Estimators
- Generalized Point Estimation with Application to Mixed Models
- Extreme Market Risk-An Extreme Value Theory Approach
- Statistical Linear Inverse Problems in Transportation Science
- Research in Statistics in Sport
- A Practical Guide to Exact Bootstrap Methodology

Invited Presentations:

- Graphical Tools for Model Selection
- Robustness, Efficiency and Regularization in Model Selection: LASSO with Disparities
- Robust Estimation for Mixture Complexity - A Model Selection Approach
- Mixed Effect Model for Longitudinal Semi-continuous Data
- Dependence in Binary Outcomes of a Longitudinal Study and Test for Order: A Quadratic Exponential Model Approach
- A Bi-variate Binary Model for Testing Dependence in Outcomes
- Efficient Estimation of Autoregressive Conditional Duration (ACD) Models Using Estimating Functions (EF)
- A Test for the Index Parameter of the Generalized Autoregressive GAR(1) Model
- Comparison and Detection of Additive and Innovative Outliers in BL(p, q, 1, 1) Processes
- Wet Weather Sewer Overflow 'Hotspot' Site Identification Using a Bayesian Network Mode
- Statistical Analysis to Detect Climate Change and Its Implications on Water Resources
- Statistical Methods for Modelling Floods in South Australia
- Disease Mapping with Area and Population Density Information
- Bayesian Analysis of Life-data under Competing Risks
- On Some Stochastic Models for Human Reproduction Process
- On the Use of Multiple Auxiliary Variables in Estimation of Current Population Mean in Two-Occasion Successive (Rotation) Sampling
- Ungauged Catchment Predictions of Low Flow Quantities: How Reliable Are they?
- Application of Gamma Process for Deterioration Prediction of Buildings from Discrete Condition Data
- An Information Control Chart for Stationary Autocorrelated Processes
- The Multivariate Binomial Model and its Application to the Valuation of Employee Share Options and Other Multivariate Contingent Claims
- A Principal Interactions Analysis Framework for Repeated Measures Data on Quantitative Traits: Application to Longitudinal Studies of Gene Environment Interactions
- Unit Root and Structural Breaks: A Survey with Applications
- Some New Perspectives on Two-Stage Fixed-Width Confidence Interval Procedures for the Mean of a Normal Distribution
- On SPRT and RSPRT for the Unknown Mean in a Normal Distribution with Equal Mean and Variance
- On Exploratory Sequential Fixed-Width Confidence Interval Procedures for the Mean Under Multiple Boundary Crossings
- Nonparametric Joint Monitoring of Location and Scale Based on Inverse Sampling and Its Applications
- Two-stage Benchmarking of Time-series Models for Small Area Estimation
- Empirical Likelihood for Small Area Estimation
- Two Stage Bayesian Benchmarked Estimators for Small Area Estimation
- Spatial Modeling in Small Area Estimation
- Logic Trees for Multilevel Data: Application to Cancer Care
- Directional Weights Car Models Using Gaussian Process Mixing
- Evaluation of Removable Statistical Interactions in Cancer Epidemiology studies
- Frailty and Cure Models in Survival Analysis
- Key Pre-Distribution Schemes for Distributed Sensor Networks via Block Designs
- Improving Anonymity in Shared Key Primitives Based on Perfect Hash Families
- Design Issues in Presence of Covariates and their Applications
- Internet Usage Trends in Medical Informatics
- Data-Driven Methods for Natural Language Processing
- Robust Multivariate Association Measures
- Modeling Climate Characteristics Using Distribution-Free Small Area Methodology
- A Robust Conditional Akaike Information Criterion for Linear Mixed Models
- A New Algorithm for Fitting Monotone Polynomials to Data
- Comparing Waiting Times in a Multi-Stage Model: A Log-Rank Approach
- Local Slicing and a Combining Algorithm On Heteroscedastic Single-Index Models
- Statistical Disclosure Limitation Methods for Confidentiality
- Estimation in Generalized Varying Coefficient Models
- Drafts Versus Auctions in the Indian Premier League
- A Second Look at Duckworth-Lewis in Twenty20
- Bayesian Modelling and Computation for One-Day Cricket
- Receiver Operating Characteristic (ROC) Curves for Measuring the Quality of Decisions in Cricket
- Recent Developments in Inference for Stochastic Processes using Estimating Functions
- Stylized Fact, Structural Breaks and Modelling Volatility of Financial Time Series
- On the Unit Root Process with Locally Stationary Disturbance
- Specification of Mixed Bilinear Time Series Models
- On the Distribution of Correlated Variance Ratio and Its Applications
- Efficient Estimators in Successive Sampling
- Robust Inference for Mixed Censored and Binary Response Models with Missing Covariates
- On a Sharper Lower Bound for a t-Percentile with an Application in Sequential Estimation
- Regenerative Stochastic Processes in Reliability Theory
- A Distribution-Free Test for Bivariate Symmetry About a Line
- General Repair Models for Maintained Systems
- Reliability Studies of Bivariate Normal and Log-Normal Distributions
- Nonparametric Regression Using Partial Least Squares Dimension Reduction in Multistate Models
- Group-Sequential Response-Adaptive Designs in the Presence of Covariate
- Intercept Poolability Test Under Cross-Sectional Dependence
- Skew-Normal Distribution and Its Applications
- Markov Chain Monte Carlo Algorithms for the Bayesian Logistic Regression Model
- Conditional Simulation in the Two-stage Hierarchical Model
- Exact Sampling for Interactable Probability Distributions
- Statistical Issues in Speaker Identification
- Herdan's K*: A Stylistic Criterion
- Rate of Decay of the Tail Dependence Coefficient for the Skew t Distribution
Software used for Quantitative Analysis in the Financial Services Workplace, and the Perspectives of Graduates, Employers and Academics.

Asymptotic Properties of GARCH-X Processes
A Bivariate Generalization of the Non-Central Negative Binomial Distribution
Optimal Target Allocation Proportion for Correlated Binary Responses in a Two-Treatment Setup
Can Affirmative Action Affect the Target Population?
Robustness of Control Chart with Circular Data
Monotonic Transformations Using Sample Cumulants in Asymptotic Expansions
Edgeworth Expansion of Triple Sampling Coverage Probability of the Mean
Transient and Asymptotic Behavior of Synchronization Processes in Assembly-like Queues

Contributed Presentations:

In Search of an Appropriate Test for the Location Parameter
New Method for Jumping MCMC Algorithms
Efficient Bayesian Estimation of the Multivariate Double Chain Markov Model
A Study of the Impact Problems Regarding English Medium Lectures Faced by Undergraduates of University of Colombo
Some Characterization Results Based on Conditional Expectation of Function of Dual Generalized Order Statistics
Use of Bootstrapping in Hotelling’s $T^2$. A Recipe Using R Language
Forecasting Models of Grade A Office Buildings Rent in Malaysia
Generalized Fractional Processes with Conditional Heteroscedasticity
Modeling Electricity Consumption in Sri Lanka and in Colombo A Comparison of Approaches
Forecasting Unit Price of Tea at Colombo Tea Auction Centre Using Time Series Regression and Artificial Neural Network Approaches
Forecasting Vegetable Extent and Production in Sri Lanka with ARIMA Model
Relationship Between Lung Function and Hypertension Among Rural Canadians using Fractional Polynomials
Generalized Linear Multilevel Models for Ordinal Categorical Responses: Methods and Application to Medical Data
Robust Analysis in Joint Models- An Application to a study on Muscular Dystrophy
Modelling the Association Between Coconut Yield of the Bandirippuwa Estate and Climatic Factors: A Multivariate Time Series Approach
A Predictive Model for Amyotrophic Lateral Sclerosis (ALS) Diagnosis
A Novel Method to Fit Boundary Line Model for Evaluating Maximum Response
Development of an Empirical Subject Classification System
The Determination of Appropriate Spare Parts Management Policy with Unknown Failure Distribution by Applying Life Cycle Analysis
An Optimal Design for Upper-Sided VSI-CUSUM Chart
A Comparison of MANOVA, Discriminant and Factor Analysis in Detecting the Effects of Power Usage in South Africa
Analysis of Efficiency in Multi-Queue against a Single Queue with Many Serves: A Study on Advertisement Counter Queues at a Leading Newspaper Company
Spatial Dependence of Conservation Choice: An Application of Bayesian Spatial Autoregressive Probit Model
Spatio-temporal Modelling of Relative Risk
Methods for Controlling the Call Placement Ratio for Outbound Dialing of a Call Center
Artificial Neural Network Approach for Modeling of Soil Temperatures: A Case Study for Bathalagoda Area
A Comparison of Support Vector Regression and Artificial Neural Network Models to Forecast Daily Colombo Stock Exchange
A Statistical Approach for Estimating One Day International Cricket Scores
An Application of Document Clustering for Categorizing Open-Ended Survey Responses
An optimal design for VSI-Shewhart X-bar Control Chart
Large Sample Testing of Toeplitz Covariance Structure
Inferences for Finite Populations Based on Bayesian Nonparametric Methods

Stochastic Modelling of Volatility and Inter-Relationship in Australian Electricity Market

Stochastic Malmquist Productivity Index

Using Excel to Enhance the Learning Process when Teaching Introductory Statistics Courses

Teaching Statistics Online

Statistical Study of Criteria for Admission to National Universities in Sri Lanka

Receiver Operating Characteristic Curve for Bi-Weibull Distribution and its Properties

Estimators for Longitudinal Latent Exposure Models: Examining Measurement Model Assumptions

Inference Procedures for Bivariate Exponential Model of Gumbel in Queueing Theory

Testing the Distribution Specification in Multivariate Local Likelihood Models

On Sampling from Arbitrary Copulae

Extreme Value Methods in Traffic Safety Research

Robust and Efficient Estimation of Tail Index of Stable Distributions

Statistics of Time Invariant Business Cycle: Evidence from Australian Data

An Analytical Expression for the Misclassification Error Rates Associated with the QDF in Discriminating Two Normal Populations

Determining Optimal Injection Moulding Process Parameters by Two Level Factorial Design with Center Points: A Case Study

Cox’s Regression Model for the Study of Diabetic Retinopathy

Non-parametric Co-Integrating Regression with NNH Errors

A Nonparametric Functional Method for Automatic Signature Recognition

Comparison of Non-Frailty Competing Risks and Frailty-Based Competing Risks Models

Improved Efficient Approximation of the Concentration Parameter for von Mises Distribution

Imputing Missing Values for the von Mises Distribution

Random and Mixed Effects Models for Directional Data

Monotone Spectral Density Estimation

Reliability Theory and Engineering Systems

Use Of Structural Equation Modelling Techniques to Overcome The Empirical Issues Associated With Quantification of Attitudes And Perceptions

Pre-Dinner Presentation

Web-based Business Intelligence and Analytics

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Preparation and type setting by

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Editor of IASSL

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