

Contributed Sessions Abstract

Session 1 IS.Recent Development of Nonparametric Methods with

- ✓ Nonparametric Density Estimation for Symbolic Data [00561.PDF](#)
- ✓ A multivariate distance-based test: Microbial Interdependence Non-parametric Test (MINT) [00156.PDF](#)
- ✓ A Nonparametric Composite Likelihood Approach to Multiple Change-Point Problems [00668.PDF](#)
- ✓ The use of permutation tests for the analysis of cluster-randomized trials [00716.pdf](#)
- ✓ A Wavelet-based Test for Serial Correlation [00747.PDF](#)
- ✓ On the double bootstrap for estimating the distribution of descriptive statistics of functional data [00601.pdf](#)

Session 2 IT. Contributed Session 2, Statistical Methods for Classification and Estimating Treatment

- ✓ Building Classification Models with Combined Biomarker Tests: Application to Early Detection of Liver Cancer [00075.pdf](#)
- ✓ A generalized fiducial approach for estimation and testing of survival function under right censoring [00712.PDF](#)
- ✓ Estimating treatment importance in multi-drug-resistant tuberculosis using Targeted Learning: an observational ind [00606.pdf](#)
- ✓ Assessment of statistical power in relation to distance between propensity-score matched samples [00795.pdf](#)
- ✓ Confidence regions for Treatment Effects in Subgroups in Biomarker Stratified Designs [00815.PDF](#)
- ✓ Subgroup analysis of treatment effects for misclassified biomarkers with time-to-event data [00816.PDF](#)

Session 3 2S. Recent Development in Adaptive Design,Dose Escalation/Finding and Study Planning

- ✓ R shiny App for an Adaptive Bayesian Sequential Design: Interactive Onsite Treatment Assignments [00246.pdf](#)
- ✓ An Adaptive Multi-stage Phase I Dose-finding Design Incorporating Longitudinal Continuous Toxicity and Efficacy [00568.pdf](#)
- ✓ Dose Escalation with Over-dose and Under-dose Control in Phase I/II Clinical Trials [00542.pdf](#)
- ✓ Covariate-Adjusted Response-Adaptive Designs for Weibull Distributed Survival Responses [00715.pdf](#)
- ✓ Repeated Measures Dose-Finding Design with Time Trend Detection in the Presence of Correlated Toxicity Data [00780.pdf](#)

Session 4 2T. Models with Random Effects Mixed Effects or Multi-Scale Factors with Applications

- ✓ Analysis of Longitudinal Survival Data with Multiple Features [00091.pdf](#)
- ✓ RANDOM EFFECTS MODELLING IN THE ANALYSIS OF EXTREME VALUES [00092.pdf](#)
- ✓ Trajectory estimation from GPS data using an adaptive smoothing spline [00145.pdf](#)
- ✓ Prism Regression: A tool for effect modification and data integration to sharpen the effect of race on cancer health [00791.pdf](#)
- ✓ Functional Mixed-effects Analysis of Variance for Human Movement Patterns [00806.pdf](#)
- ✓ Estimating Modular Brain Connectivity from High-Dimensional fMRI Data using a Multi-Scale Factor Model [00910.pdf](#)

Session 5 3S.Statistical Estimation and Testing with Applications

- ✓ Testing for structural breaks in the presence of data perturbations [00058.pdf](#)
- ✓ FIXED SIZE CONFIDENCE REGIONS FOR THE PARAMETERS OF THE LINEAR MIXED EFFECTS LOGISTIC [00171.pdf](#)
- ✓ A Systematic Procedure for Square Random Lattice Sampling [00182.pdf](#)
- ✓ ANALYSIS OF SURVIVAL USING STRATIFIED COX MODEL ON DENGUE FEVER PATIENTS [00536.pdf](#)
- ✓ Matrix-free REML for Linear Spatial-temporal State-space Models Using H-likelihood Methods [00696.pdf](#)
- ✓ Pathway analysis for RNA-Seq data using a score-based approach [00082.pdf](#)

Session 6 3T.Statistical Software and Applications of Statistical Methods/Models

- ✓ iXplore: Software for Reproducible Interactive Data Visualization and Exploration [00235.PDF](#)
- ✓ A comparison of 5 software implementations conducting mediation analysis [00794.PDF](#)
- ✓ Replacement or Dual Hub Port? A Study on the Port Relationship in the Yangtze River Delta and Pearl River Delt [00559.pdf](#)
- ✓ POWER OF OPTIMAL SIGNAL DETECTION METHODS [00595.pdf](#)
- ✓ STATISTICAL MODELS FOR THUNDERSTORM OCCURRENCES [00700.PDF](#)
- ✓ Seasonal Precipitation Prediction via Data-Adaptive Principal Component Regression [00703.PDF](#)

Session 7 4T. Statistical Methods and Models for Survival Data with Applications

- ✓ Sensitivity Analyses for Informative Censoring in Survival Data: A Trial Example [00060.pdf](#)
- ✓ Current Status Data in the Presence of a Terminal Event [00746.pdf](#)
- ✓ Non- and Semi-Parametric Analysis of Dependently Interval-Censored Failure Time Data Due to Intermittent Visi [00244.pdf](#)
- ✓ Logistic-AFT Location-Scale Cure Models for the Relative Survival with an Application to HCV Mono-Infected Pati [00840.pdf](#)

Contributed Sessions Abstract

Session 8 5T. New Approaches to Statistical Modeling and Estimation

- ✓ ON THE BIVARIATE GENERALIZED LINEAR EXPONENTIAL DISTRIBUTION [00051.pdf](#)
- ✓ A Mixture-based Approach to Estimating a Count Distribution [00065.PDF](#)
- ✓ An Autologistic Regression Model for Binary Classification of Hyperspectral Remote Sensing Imagery [00827.PDF](#)
- ✓ Modelling asymmetric bivariate data using mixtures of rotated copulas [00584.pdf](#)
- ✓ Spatio-Temporal Modeling on Spheres [00605.pdf](#)
- ✓ THE TAIL FUNCTIONS APPROACH TO CONFIDENCE ESTIMATION [00719.pdf](#)

Session 9 6T. Statistical Inference and Prediction with Applications,

- ✓ Nonignorable Models in Two-phase sampling for nonresponse [00059.pdf](#)
- ✓ An Examination of the Role of the Gamma Model in Approximating of the Distribution of Reconstructed PET Data [00090.PDF](#)
- ✓ Using logistic regression to predict underage alcohol consumption by secondary school students [00183.pdf](#)
- ✓ Effect of Imputation of Missing Data in the State Inpatient Databases on Racial Disparities Research [00585.pdf](#)
- ✓ Diagnostic analysis for Feller-Pareto linear regression model [00598.pdf](#)
- ✓ Prediction model and risk scoring tool in the local setting of obstetric practice [00878.pdf](#)

Session 10 7S. Statistical Methods with Applications to Finance and Risk Analysis

- ✓ Predicting Characteristics of Financial Time Series with Application to the State of Qatar Stock Exchange [00447.pdf](#)
- ✓ Smart indexing under regime switching uncertainty: State-estimate risk optimization [00566.pdf](#)
- ✓ CLT for Largest Eigenvalues and Unit Root Testing for High-Dimensional Nonstationary Time Series [00613.PDF](#)
- ✓ Sparse Cointegrating Market-Neutral Portfolio [00750.pdf](#)
- ✓ Shrinkage estimation of the covariance matrix for portfolio choice using high-frequency data [00847.PDF](#)
- ✓ Risk Characteristics Analysis of Internet Financial Online Lending Platform [00803.pdf](#)

Session 11 7T. Statistical Modeling, Monitoring, and Estimation with Applications

- ✓ On testing a high-dimensional white noise [00681.pdf](#)
- ✓ Robust Functional Regression Model Using a Heavy-Tailed Process [00726.PDF](#)
- ✓ Statistics on Projective Shape Spaces [00733.PDF](#)
- ✓ Monitoring Parameter Shift with Poisson Integer-valued GARCH models [00759.PDF](#)
- ✓ Partially Sequential Random Batch Monitoring and Its Applications [00779.PDF](#)
- ✓ Dependent microstructure noise and integrated volatility estimation from high-frequency data [00866.pdf](#)

Session 12 8R. Statistical Methods, Models, and Algorithms with Various Applications

- ✓ OPTIONAL RANDOMIZED RESPONSE TECHNIQUE IN TWO-PHASE SAMPLING [00137.PDF](#)
- ✓ Regularization Parameter Selection Methods for Kernel Ridge Regression [00257.pdf](#)
- ✓ Coupling Computer Models through Linking their Statistical Emulators [00587.PDF](#)
- ✓ ASYMPTOTIC PROPERTIES OF MAXIMUM LIKELIHOOD ESTIMATION FOR MULTIVARIATE DIFFUSIONS [00688.pdf](#)
- ✓ Fast NMF algorithm based on random projections [00805.PDF](#)
- ✓ Estimating the parameters of weibull distribution via particle swarm optimization based on an adaptive search space [00856.PDF](#)

Session 13 8S. Recent Advance in Classification, Clustering, and Machine Learning

- ✓ Classification under Data Contamination with Applications [00301.pdf](#)
- ✓ ROBUST WASSERSTEIN PROFILE INFERENCE AND APPLICATION TO MACHINE LEARNING [00519.PDF](#)
- ✓ Clustering functional data using projections [00599.pdf](#)
- ✓ Accuracy of Regularized D-rule for Binary Classification [00789.pdf](#)
- ✓ Differences in Differences: Bias Reduction with Regular Kernels [00807.pdf](#)

Session 14 9S. Recent Advance in Estimating Covariance Matrices, Ridge Regression, and Quantile Regressions

- ✓ Weighted Statistic in Detecting Faint and Sparse Alternatives for High-dimensional Covariance Matrices [00184.PDF](#)
- ✓ Local Shrinkage Covariance Model [00589.PDF](#)
- ✓ Conditional Quantile Regression Tree with Rank Score Statistics [00748.pdf](#)
- ✓ Zero-inflated Quantile Regression and Its Application in NOMAS [00749.pdf](#)

Contributed Sessions Abstract

- ✓ Matrix-F Variance Targeted Model on Realized Covariance Matrices [00758.pdf](#)

Session 15 9T. Bayesian Approaches for Analyzing Genomic and Clinical Data

- ✓ A Bayesian method for testing differential directed acyclic graphs [00077.pdf](#)
- ✓ Some Bayesian Approaches for Identifying Differentially Expressed Genes for RNA-seq Data Based on 2×2 [00079.PDF](#)
- ✓ A BAYESIAN ANALYSIS OF DIFFUSION TENSOR IMAGES TO STUDY THE INTERACTION BETWEEN GENE [00268.PDF](#)
- ✓ A Bayesian prediction model between a biomarker and the clinical endpoint for dichotomous variables [00819.pdf](#)
- ✓ BAYESIAN OPTIMALITY OF SEQUENTIAL SUBSET DESIGN [00958.pdf](#)

Session 16 10S. Statistical Methods in Risk and Survival Analyses

- ✓ Geometrically tempered Hamiltonian Monte Carlo [00870.pdf](#)
- ✓ Simple, Scalable and Accurate Posterior Interval Estimation [00734.PDF](#)
- ✓ Parallelized Adaptive Rejection Metropolis Sampling on the Utility of Graphics Cards [00820.pdf](#)
- ✓ Improved Convergence of Regression Adjusted Likelihood-free Bayesian Inference [00456.PDF](#)
- ✓ Rising Above Chaotic Likelihoods [00887.pdf](#)

Session 17 11R. Recent Development in Statistical Genomics

- ✓ Applications of Simultaneous Confidence Bands in Risk Assessment [00168.pdf](#)
- ✓ Out-of-sample equity premium prediction: a scenario analysis approach [00272.pdf](#)
- ✓ Comparing two cumulative incidence functions at a fixed point in time or on a long-term period [00609.PDF](#)
- ✓ A Two-Stage Logistic Regression Model to Identify Covariates that are Predictive of Agreement Between Insuranc [00773.PDF](#)
- ✓ A TWO-PHASE APPROACH TO ACCOUNT FOR UNMEASURED CONFOUNDING AND CENSORING OF [00880.pdf](#)

Session 18 8T. Monte Carlo Methods, Likelihood-Free Inference and Chaotic Likelihoods,

- ✓ Time course gene expression analysis using random effects models for identifying significant genes [00078.PDF](#)
- ✓ Effect of covariance structure on analyzing randomized clinical trials with missing data [00385.pdf](#)
- ✓ Modeling dependence in DNA methylation patterns using Beta-mixture model and copula [00358.pdf](#)
- ✓ High Throughput Gene Expression Analysis under the Case-Cohort Design: A comparison of different methods [00873.pdf](#)
- ✓ A Novel Method on Next-Generation Data Normalization and Differentially-Expressed Gene Detection [00884.pdf](#)

Session 19 12R. Bayesian Modeling and Methods with Applications

- ✓ Joint Modeling of Longitudinal Measurements and Competing Risks Data: A Bayesian Perspective [00081.PDF](#)
- ✓ Robust and Efficient Bayesian FDR Control in Integrative Analysis of Genomic Data [00745.pdf](#)
- ✓ Bayesian Nonparametric Beta Regression for Longitudinal Data [00883.pdf](#)
- ✓ CASH FLOW FORECAST AND ASSET VALUATION WITH BAYESIAN MODELING [00848.pdf](#)
- ✓ The Adaptive Hypergeometric Inverted-Beta Priors for Sparse Signals [00892.PDF](#)