#BIBC2025 Schedule

Please note that the times are indicative and may have some small variations.

Tuesday

| Start | Arc Cinema | Theatrette |
|-------|---|---|
| 08:15 | Conference Registration | |
| 08:45 | Opening remarks and housekeeping | |
| 09:05 | 5 Keynote – Chair: Chris Brien | |
| | On Finding Good Experiments by Cheng Soon Ong (~09:05–09:55) | |
| 10:00 | Session 1A – Chair: Garth Tarr | Session 1B – Chair: Scott Foster |
| | Data-Adaptive Automatic Threshold Calibration for Stability Selection by <i>Martin Huang</i> (~10:00–10:20) | Estimating abundance in small populations using pedigree reconstruction by Sarah Croft (~10:00–10:20) |
| | Variable Selection in a Joint Model for Huntington's Disease Data by Rajan Shankar (~10:20-10:40) | Accounting for heterogeneous detection rates when inferring eradication of an invasive species by Sean A. Martin (~10:20-10:40) |
| | StableMate: a regression framework for selecting stable predictors across heterogeneous data environments by Yidi Deng (~10:40-11:00) | Zero-inflated Tweedie distribution for abundance of rare ecological species by Nokuthaba Sibanda (~10:40-11:00) |
| 11:00 | Morning Tea | |
| 11:30 | Session 2A – Chair: Alan Welsh | Session 2B – Chair: James Curran |
| | Extending Spatial Capture-Recapture with the Hawkes Process by Alec B. M. van Helsdingen (~11:30–11:50) | Group Sampling with Imperfect Testing for Biosecurity Applications by Adele Jackson (~11:30–11:50) |
| | A Test for Detecting Multiple Clusters with Hotspot Spatial Properties by Kunihiko Takahashi (~11:50–12:10) | Koala Distribution and Abundance by <i>Scott D. Foster</i> (~11:50–12:10) |

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| Start | Arc Cinema | Theatrette |
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| | Outlier-robust estimation of state-space models using a penalised approach by Garth Tarr (~12:10-12:30) | Speed: An R package for Spatially Efficient Experimental Designs by Sam Rogers (~12:10–12:30) |
| | Disease cluster detection via functional additive models incorporating spatial correlation by Michio Yamamoto (~12:30–12:50) | Running Human Subject Experiments via Online Crowdsourcing by Patrick Li (~12:30–12:50) |
| 12:50 | Lunch | |
| 13:50 | Invited Session: A Cluster of Modern Clustering Methods for Biometrics - Chair: Francis Hui | Session 3B – Chair: Ruth Butler |
| | Bayesian clustered ensemble prediction for multivariate time series by Shonosuke Sugasawa (~13:50–14:20) | Building Trust Without Peer Review: Establishing Reproducibility Standards in Industrial Statistical Consulting by Dean Marchiori (~13:50–14:10) |
| | The difficulties of clustering categorical or mixed data by Louise McMillan (~14:20–14:50) | Teaching Meta-Analysis for Systematic Reviewers with Mixed Statistical Training by Xu Ning (~14:10-14:30) |
| | Species archetype models for presence-only data by Skipton N.C. Woolley (\sim 14:50–15:20) | Tales from the jungle: a personal perspective of statistical consulting since COVID by Alice Richardson (~14:30–14:50) |
| | | Better Conversations, Better Support: Strengthening Consulting through Practical Education and Community by Sharon G. Nielsen (~14:50–15:10) |
| 15:20 | Afternoon Tea | |
| 15:50 | Session 4A – Chair: Zhanglong Cao | Session 4B – Chair: Graham Hepworth |
| | Nested-factorial treatment models: types, their uses and examples by Chris Brien (~15:50–16:10) | Enhancing Fraud Detection in Banking through Random Survival Forests: Addressing Data Imbalance and Model Transparency by Arjun Sekhar (~15:50–16:10) |

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| Start | Arc Cinema | Theatrette |
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| | Integrating Spatial Data and On-Farm Experimentation to Understand Wheat Variety Performance Across Western Australia by Sandra K. Tanz (~16:10–16:30) | Using point cloud data to discover genomic regions associated with dynamic height by Colleen H Hunt (~16:10–16:30) |
| | Multi-environment trial analysis of count data with complex variance structures using generalised linear mixed models by Michael H. Mumford (~16:30–16:50) | Automatic debiased machine learning (autoDML) for causal inference: implementation and evaluation in real-world observational studies by <i>Tong Chen</i> (~16:30–16:50) |

Tuesday Poster Session

Location: GalleryTime: 17:00-19:00

- 1. Using atmospheric transport models to predict species incursions in northern Australia by Zhenhua (Iris) $Hao\ Dr$
- 2. Visualisation of multinomial multilevel time-series modelling with application to current smoking status by Alice Richardson
- 3. Paired Comparison with Cyclic Dominance: An Extension of the Bradley-Terry Model by Yuki Ohno
- 4. Cleaning Text Data with Large Language Models by Jiajia Li
- 5. ggincerta: An R Package for Uncertainty Visualisation with a Layered Grammar of Graphics by Xueqi Ma
- 6. The "Theory of Sampling" (ToS) have statisticians missed the boat? by Damian Collins
- 7. Evaluating Diagnostic Performance via Bayesian F_1 Score Estimation without a Gold Standard by Jun Tamura
- 8. Evaluating Remote Monitoring in Automated Peritoneal Dialysis: A Difference-in-Differences Analysis by Annie Conway
- 9. Judgement Post-Stratification for Covariate Adjustment in Pairwise Comparisons in Block Designs by Sam Rogers
- 10. Bayesian inference for sparse Gaussian copula graphical model by Tomotaka Momozaki
- 11. Visualization for departures from symmetry with the power-divergence-type measure in square contingency tables by Wataru Urasaki
- 12. Performance of Factor Analytic Mixed Models and Plackett-Luce Models for Genotype Ranking in Multi-Environment Trials by Jiazhe Lin

Wednesday

| Start | Arc Cinema | Theatrette |
|-------|---|--|
| 08:20 | Conference Registration | |
| 08:50 | Housekeeping | |
| 08:55 | Keynote – Chair: Thomas Lumley | |
| | Uses of gnm for Generalized (Non)linear Modelling by Heather L. Turner (~08:55–09:45) | |
| 09:50 | Session 5A – Chair: David Warton | Session 5B - Chair: Sam Rogers |
| | Scalable finite mixture of regression models for clustering species responses in ecology by Francis KC Hui (~09:50–10:10) | Using a linear mixed model based wavelet transform to model non-smooth trends arising from designed experiments by Clayton Forknall (~09:50-10:10) |
| | Elastic Net Regularization for Vector Generalized Linear Models: A Flexible Framework for High-Dimensional Biomedical Data by Wenqi Zhao (~10:10-10:30) | Functional Data Analysis for the Australian Grains Industry by Braden J. Thorne (~10:10–10:30) |
| | Fitting Generalised Linear Mixed Models using Sequential Quadratic Programming by Peter Green (~10:30-10:50) | Bayesian Ordinal Regression for Crop Development and Disease Assessment by Zhanglong Cao (~10:30-10:50) |
| 10:50 | Morning Tea | |
| 11:20 | Invited Session: Statistics for Biosecurity Surveillance – Chair: Robert Clark | Session 6B – Chair: Linh Nghiem |
| | Optimal allocation of resources between control and surveillance for complex eradication scenarios by Mahdi Parsa (~11:20-11:50) | Estimating extinction time from the fossil record using regression inversion by David I. Warton (~11:20-11:40) |
| | Inferring the rate of undetected contamination using random effects modelling of biosecurity screening histories by Sumonkanti Das and Robert Clark (~11:50–12:20) | The performance of Yu and Hoff's confidence intervals for treatment means in a one-way layout by Paul Kabaila (~11:40–12:00) |
| | Optimal sampling in border biosecurity: Application to skip-lot sampling by Raphael Trouve (~12:20–12:50) | Rate-optimal sparse gamma scale mixture detection by Michael Stewart (~12:00–12:20) |
| | | Extension of the corrected score estimator in a Poisson regression model with a measurement error by Kentarou Wada (~12:20-12:40) |

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| Start | Arc Cinema | Theatrette |
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| 12:50 | Lunch | |
| 13:00 | Social Activities | |
| 18:30 | Young (at heart) Biometrician Social Event | |

Thursday

| Start | Arc Cinema | Theatrette |
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| 08:20 | 0 Housekeeping | |
| 08:50 | | |
| 08:55 | | |
| Modularizing Biometric Models Facilitates Multistage Computing by Mevin B. Hooten (~08:55-09:45) | | |
| 09:50 | Session 7A – Chair: Vanessa Cave | Session 7B – Chair: Alice Richardson |
| | Visualize your fitted non-linear dimension reduction model in the high-dimensional data space by P. G. Jayani Lakshika (~09:50–10:10) | Reporting Odds Ratios under Fluctuating Reporting Rates in Spontaneous Reporting Systems by Tatsuhiko Anzai (~09:50-10:10) Handling Missingness in |
| | The geometry of diet: using projections to quantify the similarity between sets of dietary patterns by Beatrix Jones (~10:10-10:30) | Handling Missingness in Prevalence Estimates from National Surveys by Oyelola Adegboye (~10:10-10:30) |
| | Multivariate meta-analysis methods for high-dimensional data by Alysha M. De Livera (~10:30–10:50) | Pooled testing with penalized regression models by <i>Christopher</i> <i>Bilder</i> (~10:30–10:50) |
| 10:50 | Morning Tea | |
| 11:20 | Session 8A – Chair: Matthew Schofield | Session 8B – Chair: Chris Triggs |
| | Integrated Species Distribution Models: A Single-Index Approach by <i>Quan Vu</i> (~11:20–11:40) | Crossvalidation for predictive models in complex survey data by Thomas Lumley (~11:20-11:40) |
| | Simultaneous Inference for Latent Variable Predictions in Factor Analytic Models by Zhining Wang (~11:40-12:00) | A Set of Precise Asymptotics for Gaussian Variational Approximation in Generalised Linear Mixed Models by Nelson J. Y. Chua (~11:40-12:00) |
| | Model-based assessment of functional and phylogenetic diversity by Shaoqian Huang (~12:00–12:20) | An allometric differential equation model quantifies energy trade-offs between growth and reproduction under temperature variation by Hideyasu Shimadzu (~12:00-12:20) |
| | Fitting integrated species distribution models using mgcv by <i>Elliot Dovers</i> (~12:20–12:40) | A circular hidden Markov model for directional time series data by A.A.P.N.M. Perera (~12:20–12:40) |
| 12:40 | Lunch | |
| 12:50 | | AGM |

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| Start | Arc Cinema | Theatrette |
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| 13:40 | Invited Session: Methods and Practice in Agricultural Analytics – Chair: Emi Tanaka | Session 9B - Chair: Sam Mason |
| | Evaluating the impact of trait measurement error on genetic analysis of computer vision-based phenotypes by Gota Morota (~13:40-14:10) | Do Mice Matter? The Impact of Mice on a New Zealand Ecosanctuary by Vanessa Cave (~13:40-14:00) |
| | Predication of Daily Weight Gain with Cattle Behaviour and Daily Activity Using Triaxial Accelerometer Data by Shuwen Hu (~14:10-14:40) | Modelling Species Diversity from Citizen-Science Bird Counts by Graham Hepworth (~14:00–14:20) |
| | Fishing for Heritability in the Gill Microbiome: Why Statisticians Should get out into the field by Elle Saber (~14:40–15:10) | Continental-Scale Bayesian Analysis of Acacia Flowering Phenology: A Novel Framework Integrating Phylogenetic Signal and Circular Statistics by Owen Forbes (~14:20-14:40) |
| | | Spatio-Temporal Species Distribution Modelling by Sam Mason (~14:40-15:00) |
| 15:10 | Afternoon Tea | |
| 15:40 | Session 10A – Chair: Julian Taylor | Session 10B – Chair: Oyelola Adegboye |
| | The equalto covariance structure for meta-analysis using the glmmTMB R package by Coralie C. Williams (~15:40–16:00) | Risk of Guillain-Barré Syndrome after COVID-19 vaccination and SARS-CoV-2 infection: A multinational self-controlled case series study by Han Lu (~15:40-16:00) |
| | A Proportional Random Effect Block Bootstrap for Highly Unbalanced Clustered Data by Zhi Yang Tho (~16:00–16:20) | Childhood Risk and Resilience Factors for Pasifika Youth Respiratory Health: Accounting for Attrition and Missingness by Siwei Zhai (~16:00–16:20) |
| | Extending diagnostic validity meta-analysis to several diagnostic guidelines by Alain C. Vandal | A missing data detective story – how I navigated through a perfect storm of drop-out's, COVID and informative missingness. by Eve |
| | (~16:20–16:40) | Slavich (~16:20–16:40) |

Friday

| _ | Start | Arc Cinema | Theatrette |
|--|-------|--|--|
| 08:30 Conference Registration 09:00 Housekeeping | | Conference Registration | |
| | | Housekeeping | |
| | 09:05 | :05 Keynote – Chair: Louise McMillan | |
| | | Saddlepoint approximations for likelihoods by Jesse Goodman (~09:05–09:55) | |
| | 10:00 | Session 11A – Chair: Yidi Deng | Session 11B – Chair: David Baird |
| | | False Discovery Rate Controlled Robust Variable Selection under Cellwise Contamination by Xiaoya Sun (~10:00-10:20) | Genstat Markdown: Reproducible Research with Genstat by James M. Curran (~10:00–10:20) |
| | | A covariate-adaptive test for replicability across multiple studies with false discovery rate control by Dennis Leung (~10:20–10:40) | The 4S method for the longitudinal analysis of multidimensional questionnaires: application to Parkinson's disease progression from patient perception by Tiphaine Saulnier (~10:20–10:40) |
| | | A semi-supervised framework for diverse multiple hypothesis testing scenarios by Jack Freestone (~10:40-11:00) | heritable An R package for heritability calculations for plant breeding trials by Fonti Kar (~10:40-11:00) |
| | 11:00 | Morning Tea | |
| | 11:30 | Keynote – Chair: James Curran | |
| | 12:20 | Optimizing Research Impact Through Interdisciplinary and Collaborative Research by Charmaine B. Dean (~11:30–12:20) Closing Ceremony | |
| | 12:40 | Lunch | |
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