#BIBC2025 Schedule

Tuesday

Start	Arc Cinema	Theatrette
08:15	Conference Registration	
08:45	Opening remarks and housekeeping	
09:05	**Keynote** – *Chair: Chris Brien*	
	On Finding Good Experiments by *Cheng Soon Ong*	
10:00	**Session 1A** – *Chair: Garth Tarr*	**Session 1B** – *Chair: Scott Foster*
	Data-Adaptive Automatic Threshold Calibration for Stability Selection by *Martin Huang*	**Estimating abundance in small populations using pedigree reconstruction** by *Sarah Croft*
	Variable Selection in a Joint Model for Huntington's Disease Data by *Rajan Shankar*	**Accounting for heterogeneous detection rates when inferring eradication of an invasive species** by *Sean A. Martin*
	StableMate: a regression framework for selecting stable predictors across heterogeneous data environments by *Yidi Deng*	**Zero-inflated Tweedie distribution for abundance of rare ecological species** by *Nokuthaba Sibanda*
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*	**Group Sampling with Imperfect Testing for Biosecurity Applications** by *Adele Jackson*
	A Test for Detecting Multiple Clusters with Hotspot Spatial Properties by *Kunihiko Takahashi*	**Koala Distribution and Abundance** by *Scott D. Foster*
	Outlier-robust estimation of state-space models using a penalised approach by *Garth Tarr*	**Speed: An R package for Spatially Efficient Experimental Designs** by *Sam Rogers*

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Start	Arc Cinema	Theatrette
	Disease cluster detection via functional additive models incorporating spatial correlation by *Michio Yamamoto*	**Running Human Subject Experiments via Online Crowdsourcing** by *Patrick Li*
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*	**Building Trust Without Peer Review: Establishing Reproducibility Standards in Industrial Statistical Consulting** by *Dean Marchiori*
	The difficulties of clustering categorical or mixed data by *Louise McMillan*	**Teaching Meta-Analysis for Systematic Reviewers with Mixed Statistical Training** by *Xu Ning*
	Species archetype models for presence-only data by *Skipton N.C. Woolley*	**Tales from the jungle: a personal perspective of statistical consulting since COVID** by *Alice Richardson*
		Better Conversations, Better Support: Strengthening Consulting through Practical Education and Community by *Sharon G. Nielsen*
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*	**Enhancing Fraud Detection in Banking through Random Survival Forests: Addressing Data Imbalance and Model Transparency** by *Arjun Sekhar*
	Integrating Spatial Data and On-Farm Experimentation to Understand Wheat Variety Performance Across Western Australia by *Sandra K. Tanz*	**Using point cloud data to discover genomic regions associated with dynamic height** by *Colleen H Hunt*
	Multi-environment trial analysis of count data with complex variance structures using generalised linear mixed models by *Michael H. Mumford*	**Automatic debiased machine learning (autoDML) for causal inference: implementation and evaluation in real-world observational studies** by *Tong Chen*

Tuesday Poster Session

- Location: Gallery
- Time: 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
08:30	Conference Registration	
08:50	Housekeeping	
08:55	**Keynote** – *Chair: Thomas Lumley*	
	Uses of gnm for Generalized (Non)linear Modelling by *Heather L. Turner*	
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*	**Using a linear mixed model based wavelet transform to model non-smooth trends arising from designed experiments** by *Clayton Forknall*

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Start	Arc Cinema	Theatrette
	Elastic Net Regularization for Vector Generalized Linear Models: A Flexible Framework for High-Dimensional Biomedical Data by *Wenqi Zhao*	**Functional Data Analysis for the Australian Grains Industry** by *Braden J. Thorne*
	Fitting Generalised Linear Mixed Models using Sequential Quadratic Programming by *Peter Green*	**Bayesian Ordinal Regression for Crop Development and Disease Assessment** by *Zhanglong Cao*
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*	**Estimating extinction time from the fossil record using regression inversion** by *David I. Warton*
	Inferring the rate of undetected contamination using random effects modelling of biosecurity screening histories by *Sumonkanti Das and Robert Clark*	**The performance of Yu and Hoff's confidence intervals for treatment means in a one-way layout** by *Paul Kabaila*
	Optimal sampling in border biosecurity: Application to skip-lot sampling by *Raphael Trouve*	**Rate-optimal sparse gamma scale mixture detection** by *Michael Stewart*
		Extension of the corrected score estimator in a Poisson regression model with a measurement error by *Kentarou Wada*
12:50	Lunch	
13:00	Social Activities	
18:30	Young (at heart) Biometrician Social Event	

Thursday

Start	Arc Cinema	Theatrette
08:30	Conference Registration	
08:50	Housekeeping	
08:55	**Invited Session: Statistics for Biosecurity Surveillance** – *Chair: Beatrix Jones*	
	Modularizing Biometric Models Facilitates Multistage Computing by *Mevin B. Hooten*	
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*	**Reporting Odds Ratios under Fluctuating Reporting Rates in Spontaneous Reporting Systems** by *Tatsuhiko Anzai*
	The geometry of diet: using projections to quantify the similarity between sets of dietary patterns by *Beatrix Jones*	**Handling Missingness in Prevalence Estimates from National Surveys** by *Oyelola Adegboye*
	Multivariate meta-analysis methods for high-dimensional data by *Alysha M. De Livera*	**Pooled testing with penalized regression models** by *Christopher Bilder*
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 *Quan Vu*	**Crossvalidation for predictive models in complex survey data** by *Thomas Lumley*
	Simultaneous Inference for Latent Variable Predictions in Factor Analytic Models by *Zhining Wang*	**A Set of Precise Asymptotics for Gaussian Variational Approximation in Generalised Linear Mixed Models** by *Nelson J. Y. Chua*
	Model-based assessment of functional and phylogenetic diversity by *Shaoqian Huang*	**An allometric differential equation model quantifies energy trade-offs between growth and reproduction under temperature variation** by *Hideyasu Shimadzu*
	Fitting integrated species distribution models using mgcv by *Elliot Dovers*	**A circular hidden Markov model for directional time series data** by *A.A.P.N.M. Perera*
12:40	Lunch	
12:50		AGM

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Start	Arc Cinema	Theatrette
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*	**Do Mice Matter? The Impact of Mice on a New Zealand Ecosanctuary** by *Vanessa Cave*
	Predication of Daily Weight Gain with Cattle Behaviour and Daily Activity Using Triaxial Accelerometer Data by *Shuwen Hu*	**Modelling Species Diversity from Citizen-Science Bird Counts** by *Graham Hepworth*
	Fishing for Heritability in the Gill Microbiome: Why Statisticians Should get out into the field by *Elle Saber*	**Continental-Scale Bayesian Analysis of Acacia Flowering Phenology: A Novel Framework Integrating Phylogenetic Signal and Circular Statistics** by *Owen Forbes*
		Spatio-Temporal Species Distribution Modelling by *Sam Mason*
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*	**Extending diagnostic validity meta-analysis to several diagnostic guidelines** by *Alain C. Vandal*
	Simulation-based Inference about Variance Components by *Farwa Saleem*	**Risk of Guillain-Barré Syndrome after COVID-19 vaccination and SARS-CoV-2 infection: A multinational self-controlled case series study** by *Han Lu*
	A Proportional Random Effect Block Bootstrap for Highly Unbalanced Clustered Data by *Zhi Yang Tho*	**Childhood Risk and Resilience Factors for Pasifika Youth Respiratory Health: Accounting for Attrition and Missingness** by *Siwei Zhai*
		A missing data detective story – how I navigated through a perfect storm of drop-out's, COVID and informative missingness. by *Eve Slavich*
18:30	Conference Dinner	

Friday

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