

## 16th Research Students Conference In Probability And Statistics

Friday 26 March - Monday 29 March 1993

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### CONFERENCE TIMETABLE

Friday 26 March	
3:00-5:30	Conference registration, Lonsdale College Reception.
6:00	Evening meal served in Cartmel Restaurant.
7:00	Bar open.
7:30	Optional trip to Lancaster.
Saturday 27 March	
8:00-9:00	Breakfast
	Single Session
9:00-9:05	Welcome
9:05-9:30	Paula Yates <i>Change-over designs for dual versus single treatment contrasts.</i>
9:30-9:55	Samantha Low Choy <i>Attracting dingos (using Bayesian analysis).</i>
	Session A
2:00-2:25	John Little <i>The analysis of medical images.</i>
2:25-2:50	Andrew Holmes <i>Significance testing for images - a non-parametric approach.</i>
2:50-3:15	James Shaw <i>Outlier detection.</i>
3:15-3:40	Paul Greenfield <i>T.B.A. (Image analysis.)</i>
	Session B
2:00-2:25	Theofanis Sapatinas <i>Identifiability of mixtures of distributions.</i>
9:55-10:20	Jon Barry <i>Space-time kriging and rugby balls.</i>
10:20-10:45	Louise Burt <i>Simple stochastic modelling of a volcano's eruptive history.</i>
10:45-11:10	Tea and Coffee
	Single Session
11:10-11:35	Graeme Archer <i>An empirical Bayesian approach to parameter estimation and image restoration.</i>
11:35-12:00	Dave Signorini <i>Variable kernel density estimation.</i>
12:00-12:25	Margaret Macleod <i>The Scottish Record Linkage System and the West of Scotland Coronary Prevention Study.</i>
12:25-12:50	Catriona Hayes <i>Comparative audit.</i>
1:00	Lunch

2:25-2:50	Simon Harris <i>Excursions of brownian motion.</i>	9:00-12:00	Bar open in Carmel Lecture Theatre.
2:50-3:15	Adao Luiz Hentges <i>Predictive distributions in binary models with missing data in the explanatory variables.</i>	9:30	Quiz, also in Carmel Lecture Theatre.
3:15-3:40	Enoch K Asare <i>Spatial analysis of nerve and glial cell patterns.</i>	<b>Sunday 28 March</b>	
3:40-4:10	Tea and Coffee	8:00-9:00	Breakfast
Session A			
4:10-4:35	John Haywood <i>Minimisation of multi-step ahead forecast errors.</i>	9:00-9:25	Saraleesan Nadarajah <i>Extreme value theory for order dependent variables.</i>
4:35-5:00	Zazli Chik <i>Randomisation test for comparing stationary stochastic signals.</i>	9:25-9:50	Anthony Ledford <i>Independence testing of bivariate extremes.</i>
5:00-5:25	Norman Daleglis <i>Statistical characterisation of long term climatic change.</i>	9:50-10:15	David Golya <i>Extreme value theory: By the way where has all my data gone?</i>
5:25-5:50	Valderio A Reisen <i>Analysis of real data using long memory model.</i>	10:15-10:40	Mark Dixon <i>Trends in extreme sea levels.</i>
Session B			
4:10-4:35	Susan Todd <i>The calculation of confidence intervals after a sequential clinical trial.</i>	9:00-9:25	Janine Bishop <i>Reference ranges - three applications.</i>
4:35-5:00	Martina Sooriyarachchi <i>Use of sample size review in clinical trials for making decisions other than stopping.</i>	9:25-9:50	Dinley Moreira Dos Santos <i>Comparing two frailty models specifications.</i>
5:00-5:25	Kaniz Fatima <i>Analysis of repeated ordinal data.</i>	9:50-10:15	Rebecca Hardy <i>Estimation issues for meta-analysis in medical research.</i>
5:25-5:50	Michael Smith <i>Comparison of methods for the analysis of a cross-over design.</i>	10:15-10:40	Heather Cordell <i>Statistical methods in the genetic analysis of type 1 diabetes.</i>
6:30	Dinner	10:40-11:10	Tea and Coffee
7:00-9:00	Meet the sponsors, Carmel Lecture Theatre.		

Session A

- 11:10-11:35 Peter Holmans  
*Likelihood ratio tests for linkage using affected sib pairs.*
- 11:35-12:00 Barbara Murray  
*Statistical analysis of low birthweight in Glasgow.*
- 12:00-12:25 Jennifer Freeman  
*The statistics of growth standards.*
- 12:25-12:50 Damian Clancy  
*Dynamic population epidemics.*

Session B

- 2:00-2:25 Paul Hutchinson  
*Modelling monthly ozone curves.*
- 2:25-2:50 Kevin Hayes  
*A comparison of spatial models by the use of pairwise based diagnostics.*
- 2:50-3:15 Elizabeth Ackerley  
*Fitting the non-standard Gamma in GLIM4.*
- 3:15-3:40 Amanda Hardie  
*Lactation curve modelling.*
- 3:40-4:10 Tea and Coffee

Session B

- 11:10-11:35 Nor Aishah Hamzah  
*Robust regression estimation: An extension in generalised linear models.*
- 11:35-12:00 Adam Ciisp  
*Multivariate- $t$  M-estimators for linear regression models.*
- 12:00-12:25 Kathleen Bennett  
*Non-parametric estimation of finite population totals.*
- 12:25-12:50 Stuart Young  
*Non-parametric analysis of covariance.*
- 1:00 Lunch

Session A

- 4:10-4:35 Eileen Wright  
*The detection of chronic disfunction in kidney transplant patients.*
- 4:35-5:00 C.J. Sutton  
*How does right-censoring affect inference on rates of change of a continuous variable in two groups.*
- 5:00-5:25 Marco Minozzo  
*Prequentist inference: asymptotic distribution of a test statistic under production and frequentist models.*
- 5:25-5:50 Suzanne Powell  
*Numerical evaluation of a failure probability.*

Session B

- 2:00-2:25 Mehmet Firat  
*Bayesian methods in the selection of farm animals.*
- 2:25-2:50 Ryan Cheal  
*Ancestral inference on the Przewalski horse pedigree.*
- 2:50-3:15 Nicola Camp  
*The analysis of complex pedigrees.*
- 3:15-3:40 Dominic Neary  
*Analysis of ordinal categorical repeated measures data.*

Session B

- 4:10-4:35 Robert Alston  
*A new index of aggregation*
- 4:35-5:00 Stephen Corcoran  
*Recent approaches to constructing Non-parametric likelihoods.*
- 5:00-5:25 Simon Greatrix  
*Scheduling jobs on a single server.*
- 5:25-5:50 Mark Brown  
*The number of evolutionary stable strategies of an N-strategy game.*

7:00-9:00 Conference Dinner

7:00-11:00 Bar open

Monday 29 March

8:00-9:00 Breakfast

Session A

9:00-9:25 Helen Mills  
*Assessing the adequacy of nutrient intakes: results from the Scottish heart health study.*

9:25-9:50 J.R. Carpenter  
*Monte Carlo confidence intervals.*

9:50-10:15 Gordon Hay  
*Modelling the spread of H.I.V./A.I.D.S. via shared injecting equipment.*

10:15-10:40 Karen Vines  
*Fitting Bayesian multiple random effects models.*

10:40-11:10 Tea and Coffee

Session B

9:00-9:25 Louise Taylor  
*Estimation of parametric models with randomised parameters.*

9:25-9:50 Alberto Roverato  
*Asymptotic covariance matrix for maximum likelihood estimate of  $\Sigma^{-1}$  in graphical Gaussian models.*

9:50-10:15 Ian White  
*Bias in correcting for errors in variables*

10:15-10:40 Neil Spencer  
*Using instrumental variables in estimating lagged multilevel models.*

10:40-11:10 Tea and Coffee

Session A

11:10-11:35 Alipore R Moraes  
*Talking about screening.*

11:35-12:00 David Laws  
*Optimal design of screens for a binary response.*

12:00-12:25 Teresa Smith  
*Surrogate outcome measures in screening trials: an application to cervical screening programmes.*

12:25-12:50 Jorge Olequin  
*On the analysis of unreplicated factorials.*

Session B

11:10-11:35 Gary Brown  
*Cook's distance.*

11:35-12:00 Ben Gordor  
*On detection of multiple outliers in high dimensional data sets.*

12:00-12:25 Anwer Khurshid  
*Properties of estimators used in 2 and 3 point quantal response experiments.*

12:25-12:50 Lorraine Law  
*Cross-over designs subject to dropouts.*

1:00 Lunch

Depart

The single session talks on Saturday morning will take place in the Biology Lecture Theatre on the ground floor of the Environmental Science building which is on the South Spine. Session A talks will be in B18 on the second floor of Eyde College, and Session B talks will be in C17 on the floor above. All meals will be taken in Carmel Restaurant.