Academic Activities—Charlotte M. Jones-Todd

Invited Talks

Making sense of patterns and connecting the dots in Area ΣI August 31st 2021
Faculty of Science International Open Day, University of Auckland, NZ

Modelling latent phenomena in point referenced data June 24th 2021
Department of Mathematics & Statistics, Australian National University (via Zoom)

Point patterns in a point pattern world November 17th 2020
Research Showcase, School of Biological Sciences, University of Auckland, NZ

Getting to the point of log-Gaussian Cox processes October 24th 2020
Department of Mathematics & Statistics, University of Glasgow (via Zoom)

Me, myself, and R July 21st 2020
R-Ladies, Auckland, NZ

A time to kill: Great British serial killers September 5th 2017
Royal Statistical Society Conference, Glasgow, Scotland

Why spatial models are useful in ecology (understanding the mechanics of dots) September 15th 2015
Statistische Woche, Hamburg, Germany

Easy on the eyes: A spatio-temporal analysis of eye movement September 9th 2015
Royal Statistical Society Conference, Exeter, UK

INLA & SPDEs: Using latent Gaussian models to infer the spatial structure inherent in point patterns April 1st 2015
University of Lisbon, Portugal

Using INLA to fit complex spatial models to ecological data April 1st 2015
University of Lisbon, Portugal

Other Conference Talks, Seminars, and Presentations

Systematic effects and latent phenomena in point referenced data July 5th 2021
virtual Australia and New Zealand Statistical Conference (vANZSC)

Modelling point referenced data June 17th 2021
virtual National Centre for Statistical Ecology (vNCSE)

A discrete-space continuous-time model for marine mammal exposure to Navy sonar November 24th 2020
New Zealand Statistical Association (NZSA) conference, Auckland, NZ

Modelling systematic effects and latent phenomena in point referenced data November 17th 2020
Statistical ecology group, Department of Statistics, University of Auckland, NZ

Marine mammal exposure to Navy sonar: a continuous-time discrete-space model June 26th 2020
virtual International Statistical Ecology Conference (vISEC)

Animating statistical theory February 22nd 2020
satRdays, Auckland, NZ

Modelling systematic effects and latent phenomena in point referenced data December 6th 2019
School of Biological Scienes, University of Auckland, NZ

Marine mammal exposure to Navy sonar: a continuous-time discrete-space model December 2nd 2019
Statistics in Ecology and Environmental Monitoring (SEEM) Conference, Wellington, NZ

Shared latent fields for mark-dependence in a log-Gaussian Cox process December 4th 2018
Australasian Applied Statistics Conference (AASC), Rotorua, NZ

Shared latent fields for mark-dependence in a log-Gaussian Cox process July 4th 2018
International Statistical Ecology Conference (ISEC), St Andrews, Scotland

Spatial modelling (INLA and some other stuff) March 16th 2018
NIWA, Wellington, NZ

How spatial modelling works February 20th 2018
NIWA, Hamilton, NZ

Modelling spatio-temporal data September 21st 2016
CREEM, University of St Andrews, Scotland

Modelling unusual spatial structures: An application to colorectal cancer data July 25th 2016
University of Cape Town, South Africa

A spatio-temporal marked point process model July 1st 2016
International Statistical Ecology Conference (ISEC), Seattle, USA

A spatio-temporal multi-species model June 29th 2015
NCSE summer meeting, Falmouth, UK

Terrorism in space and time June 12th 2015
Spatial Statistics: Emerging Patterns, Avignon, France

Spatio-temporal modelling April 30th 2015
Geo-Environmental Modelling Symposium, University of St Andrews, Scotland

Spatial modelling: Its use in predictive policing April 28th 2015
Workshop on Crime Pattern Analysis and Predictive Policing, Dundee, Scotland

INLA & SPDEs: Using latent Gaussian models to infer the spatial structure inherent in point patterns April 1st 2015
University of Lisbon, Portugal

Using latent Gaussian models to infer the spatial structure inherent in point patterns January 1st 2015
CREEM, University of St Andrews, Scotland

Spatial / spatio-temporal modelling August 29th 2014
CREEM, University of St Andrews, Scotland

The use of spatio-temporal models in intelligence-led policing April 30th 2014
37th Research Students' Conference in Probability and Statistics, Nottingham, UK

Fitting a spatial model to Atlantic salmon fry abundance data, using integrated nested Laplace approximation August 2013
CREEM, University of St Andrews, Scotland

Posters

A Bayesian approach to modelling fine-scale spatial dynamics of non-state terrorism: world study, 2002-2013 June 13th 2016
International Society for Bayesian Analysis (ISBA) conference

Did "Operation Iraqi Freedom" work?
(A joint marked point process modelling approach) December 3rd 2015
Challenges and Perspectives in Modelling the Spatial Dynamics of Conflict and Terrorism, University of St Andrews, Scotland

Where did all the points go? June 9th–12th 2015
Spatial Statistics: Emerging Patterns, Avignon, France

The use of spatio-temporal ecological models in predictive policing July 1st–4th 2014
International Statistical Ecology Conference (ISEC), Montpellier, France

Preventing crime through spatial modelling November 13th 2013
Scottish Institute for Policing Research Meeting, Edinburgh, Scotland

Other Conferences/Workshops Attended

The International Association for Statistical Education (IASE)
Virtual Satellite Conference August 30th–September 4th 2021

What Are The Odds?
An Interactive Workshop in Sports Modelling, Exeter, UK July 7th–8th 2016

Flexible Programming with BUGS Models (NIMBLE), Seattle, USA June 27th 2016

Ecological Survey Spatial Modelling (ESSMod), St Andrews, Scotland March 21st–22nd 2016

Software Carpentry, St Andrews, Scotland June 18th–19th 2015

Teaching

Teaching at the University of Auckland

BIOSCI738 - Advanced Biological Data Analysis 2021
University of Auckland.

BIOSCI220 - Quantitative Biology 2021
University of Auckland.

BIOSCI220 - Quantitative Biology 2020
University of Auckland.

STATS210 - Statistical Theory 2019
Southwest University (SWU), Chongqing, China.

Tutoring at the University of St Andrews

Centre for Academic, Professional and Organisational Development
(CAPOD) **Course tutor - using R for statistics** 2015–2016

Centre for Academic, Professional and Organisational Development
(CAPOD) **mathematics and statistics support** 2013–2016

MT1007 - Statistics in Practice 2014

MT2004 - Statistics 2014

MT1002 - Mathematics 2014

MT5753 - Statistical Modelling 2013

MT1001 - Introductory Mathematics 2013

MT1008 - Mathematical Information Technology 2013

Workshops

Statistics and R November–December 2018
Instructor
NIWA, Hamilton, NZ

Keep going with Git September 6th 2018
Instructor
NIWA, Hamilton, NZ

Make your R code shiny May 10th 2018
Instructor
NIWA, Hamilton, NZ

Get going with Git March 15th 2018
Instructor
NIWA, Hamilton, NZ

Introductory statistics course August 2nd–5th 2016
Tutor
The Namibia University of Science and Technology, Namibia

Statistics for spatio-temporal data: INLA and SECR July 27th 2016
Instructor & Demonstrator
Stellenbosch University, South Africa

Challenges and perspectives in modelling the spatial dynamics of conflict and terrorism December 3rd 2015
Presenter
University of St Andrews, Scotland

Using INLA to fit complex spatial models to ecological data April 1st 2015
Instructor
University of Lisbon, Portugal

Minicourse: The SPDE approach flexible spatial modelling in practice Dec 3rd 2014
Instructor
CREEM University of St Andrews, Scotland

Using the integrated nested Laplace approximation approach to fit complex ecological models June 28th 2014
Demonstrator
International Statistical Ecology Conference (ISEC), Montpellier, France

Spatial modelling with INLA June 2nd–4th 2014
Demonstrator
CREEM University of St Andrews, Scotland

Other

Centre for Academic, Professional and Organisational Development
(CAPOD) **Dissertation support** 2014–2015

Student Support worker **Note-taker and examination scribe/reader** 2014–2016

Centre for Academic, Professional and Organisational Development
(CAPOD) **Redesign of statistical support website** 2013

School of Mathematics and Statistics
Undergraduate module marking 2013–2016