

Curriculum Vitae of Michael Stewart

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Contact Details

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Employment

Jan 2005– **Lecturer**

Jan 1996–Dec 2004 **Associate Lecturer**

School of Mathematics and Statistics
University of Sydney

Jan 1994–Dec 1995 **Research Assistant**

Department of Physiology
University of Sydney

Education

Tertiary qualifications obtained from the University of Sydney:

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|-----------------------------|--|
| Doctor of Philosophy | Awarded degree Dec 2002
Thesis: “Asymptotic methods for tests of homogeneity for finite mixture models” |
| Master of Arts | Awarded degree Feb 1996
Thesis: “Non-regular maximum likelihood for release at synapses” |
| Bachelor of Science | Awarded degree Jan 1994 |

Research Interests

Mixture Models, Extremes of Gaussian Processes, Empirical Process Approximations, Statistical Inference in the Life Sciences.

Publications

- HALL, P. AND STEWART, M., *Theoretical analysis of power for a two component normal mixture model*, Journal of Statistical Planning and Inference, 134 (2005), 158–179.
- STEWART, M. AND ROBINSON, J., *Extremes of certain non-Donsker empirical processes*, Extremes, 6 (2003), 319–333.
- J.F.P. BRIDGES, M. STEWART, M.T. KING, K. VAN GOOL, *Adapting portfolio theory for the evaluation of multiple investments in health with a multiplicative extension for treatment synergies*, European Journal of Health Economics, 3 (2002), 47–53.
- CHIU, S. N., QUINE, M. P., STEWART, M., *Nonparametric and parametric estimation for a linear birth–growth model*, Biometrics, 56 (2000), 755–760.

Conference Presentations

- July 2004 6th Joint Bernoulli Society/
Institute of Mathematical Statistics Meeting,
Barcelona
Power for tests of no mixture
- December 2003 Bernoulli Society East Asian and Pacific Regional Conference,
Hong Kong (invited speaker)
Asymptotics for tests of homogeneity in exponential family mixtures
- July 2002 28th Conference on Stochastic Processes
and their Applications, Melbourne
*Asymptotic methods for tests of homogeneity
in finite mixture models*
- July 2000 15th Australian Statistical Conference, Adelaide
On the simple mixture problem

Award

Statistical Society of Australia, N.S.W. Branch, Award for Postgraduate Excellence, 2001 (joint winner).

Seminars

Presented at the University of Sydney Statistics seminar series:

- May 2002 *Asymptotic methods for tests of homogeneity
in finite mixture models*
- June 2001 *On the simple mixture problem*
- Aug 1999 *Asymptotic distribution of the supremum of a
non-stationary Gaussian process*

Computing Skills

Experienced in the use of S-PLUS, R. Some knowledge of GLIM and MATLAB.

Teaching Experience

Teaching duties at the University of Sydney over the period 1996–2005 include

- designing a new course on the Design of Experiments (Advanced) for third year students;
- lecture delivery for and coordination of courses on the Design of Experiments for third year students, Data Analysis and Statistical Models for second year students and Introductory Statistics courses for first year students at various levels of assumed mathematical ability;
- tutoring for all the above courses, as well as third year courses in Linear Models, and second year courses in Estimation Theory and Hypothesis Testing.