

Res. Lett. Inf. Math. Sci., 2005, Vol.8

Available online at <http://iims.massey.ac.nz/research/letters/>

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Foreword

The 14th International Workshop on Matrices and Statistics (IWMS-2005) was held on the Albany campus of Massey University in Auckland, New Zealand, 29 March–1 April 2005. This Workshop was a Satellite meeting to the 55th Biennial Session of the International Statistical Institute held in Sydney, Australia, 5–12 April 2005 and was endorsed by the International Linear Algebra Society. The Workshop was supported by the New Zealand Statistical Association, Massey University, New Zealand Institute of Mathematics & its Applications, Royal Society of New Zealand, and Statistics New Zealand.

The International Organising Committee comprised Simo Puntanen (University of Tampere, Finland), George P. H. Styan (chair; McGill University, Canada) & Hans Joachim Werner (vice-chair; Universität Bonn, Germany). The Local Organising Committee was chaired by Jeffrey J. Hunter, and included Freda Anderson (Workshop Secretary), Merrill Bowers, Paul Cowpertwait, Marie Fitch, Stephen Ford, Beatrix Jones, Claire Jordan, Nikki Luke, Barry McDonald, Dennis Viehland, and Danny Walsh, all of Massey University, Auckland.

A Special Memorial Session in honour of Jerzy K. Baksalary (1944–2005) was organized by Oskar Maria Baksalary (Adam Mickiewicz University, Poland), Simo Puntanen, George P. H. Styan, and Götz Trenkler (Universität Dortmund, Germany).

The keynote speakers were: C. Radhakrishna Rao, Pennsylvania State University, USA – “Statistical proofs of matrix theorems”; Shayle R. Searle, Cornell University, USA – “Reflections on a fifty year random walk midst matrices and statistics”; George A. F. Seber, University of Auckland, New Zealand – “Things my mother never told me about matrices”; and Eugene Seneta, University of Sydney, Australia – “Coefficients of ergodicity in a matrix setting”.

C. Radhakrishna Rao was sponsored by Nokia as the IWMS-2005 Nokia Lecturer and was the New Zealand Statistical Association Visiting Lecturer for 2005 and a Massey University Distinguished Visitor. Shayle R. Searle was sponsored by SAS as the IWMS-2005 SAS Lecturer. Eugene Seneta was sponsored as the New Zealand Mathematical Society Lecturer for 2005.

The Workshop opened on 29 March 2005 with a powhiri, the Maori welcome ceremony. It removes the tapu of the Manuhiri (visitors) to make them one with the Tangata Whenua (home people) and is a gradual process of the Manuhiri and the Tangata Whenua coming together. The excursion on 30 March explored Waiheke Island and its beaches, wineries and a boutique brewery.

The invited lectures were: S. Ejaz Ahmed – “Approximation-assisted estimation of eigenvectors under quadratic loss”; Anyue Chen – “Asymptotic birth-death

processes: a matrix analysis approach”; Karl E. Gustafson – “The geometry of statistical efficiency”; Stephen Haslett & John Haslett – “What are the residuals for the linear model?”; Moshe Haviv – “On singularly perturbed Markov chains”; Jarkko Isotalo & Simo Puntanen – “Comparison of the ordinary least squares predictor and the best linear unbiased predictor in the general Gauss–Markov model”; J. A. ‘Nye’ John – “Inverse of the information matrix”; Estate Khmaladze – “Inverse matrices, Volterra operators and innovation processes: application to statistics”, Tõnu Kollo & Dietrich von Rosen: “Approximation of the parameter distributions of growth curve model”; Alexander Kukush – “Invariant estimator in a quadratic measurement error model”; Alan J. Lee & Alastair J. Scott – “Semi-parametric efficiency, projection and the Scott–Wild estimator”; Simo Puntanen, Ka Lok Chu, Jarkko Isotalo & George P. H. Styan – “Decomposing the Watson efficiency in partitioned linear models”; C. Radhakrishna Rao – “Anti-eigen and anti-singular values of a matrix and applications to problems in statistics”; George P. H. Styan, Ka Lok Chu, Jarkko Isotalo & Simo Puntanen – “Inequalities and equalities for the Watson efficiency in orthogonally partitioned full rank linear models”; Garry J. Tee – “Eigenvectors of block circulant matrices”; Götz Trenkler – “On the commutativity of orthogonal projectors”; Hans Joachim Werner & Ingram Olkin – “On permutations of matrix products”.

The Workshop group photo is on the next page; for other photos please visit <http://iwms2005.massey.ac.nz/photos.html>.

The 15th International Workshop on Matrices and Statistics (IWMS-2006) will be held in Uppsala, Sweden, 13–17 June 2006: <http://www.bt.slu.se/iwms2006/iwms06.html>. The International Organizing Committee is chaired by Hans Joachim Werner: ujw902@uni-bonn.de and the Local Organizing Committee is chaired by Dietrich von Rosen (Swedish University of Agricultural Sciences): iwms06@bt.slu.se

Jeffrey J. Hunter & George P. H. Styan

July 2005



Participants of the 14th IWMS Workshop
(Photograph by Magdala Werner)

Row 7: Khmaladze E (Victoria Univ Wellington, NZ), Haslett S (Massey, Palmerston North, NZ), Trenkler G (Dortmund, Germany), Styan G (McGill, Canada), Seber G (Auckland, NZ), Scott A (Auckland, NZ), Jones B (Massey, Auckland, NZ), John N (Waikato, Hamilton, NZ), Walsh D (Massey, Auckland, NZ); **Row 6:** Isotalo J (Tampere, Finland), Chen A (Greenwich, England), Ahmed E (Windsor, Canada), Littlejohn R (AgResearch, Invermay, NZ), Jones G (Massey, Palmerston North, NZ), Sakamoto W (Osaka, Japan); **Row 5:** Schaffrin B (Ohio, US), Doherty M (Statistics NZ, Wellington, NZ), Henderson H (AgResearch, Hamilton, NZ), Ruggiero K (CSIRO, Canberra, Australia), Cowpertwait P (Massey, Auckland, NZ); **Row 4:** Kollo T (Tartu, Estonia), Schliep K (Massey, Palmerston North, NZ), Vehkalahti K (Helsinki, Finland), Puntanen S (Tampere, Finland), Kukush A (Kiev, Ukraine), Seneta E (Sydney, Australia); **Row 3:** McDonald B (Massey, Auckland, NZ), Cuadras C (Barcelona, Spain), Bekker A (Univ SA, Pretoria, South Africa), Traat I (Tartu, Estonia), Fitch M (Massey, Auckland, NZ), Haviv M (Hebrew Univ Jerusalem, Israel); **Row 2:** Gustafson K (Colorado, US), Tee G (Auckland, NZ), Thrush T (Massey, Auckland, NZ), Scheffer J (Massey, Auckland, NZ), Searle S (Cornell, US), Rao C R (Penn State, US), Jordan C (Massey, Auckland, NZ), Anderson S (SAS, NZ), Im E (Hawaii, US); **Row 1:** Werner J (Bonn, Germany), Hunter J (Massey, Auckland, NZ); **Absent:** Islam R (Charles Sturt, Australia), Lee A (Auckland, NZ), Matsubara K (Osaka, Japan), Wang S-G (Beijing, China)