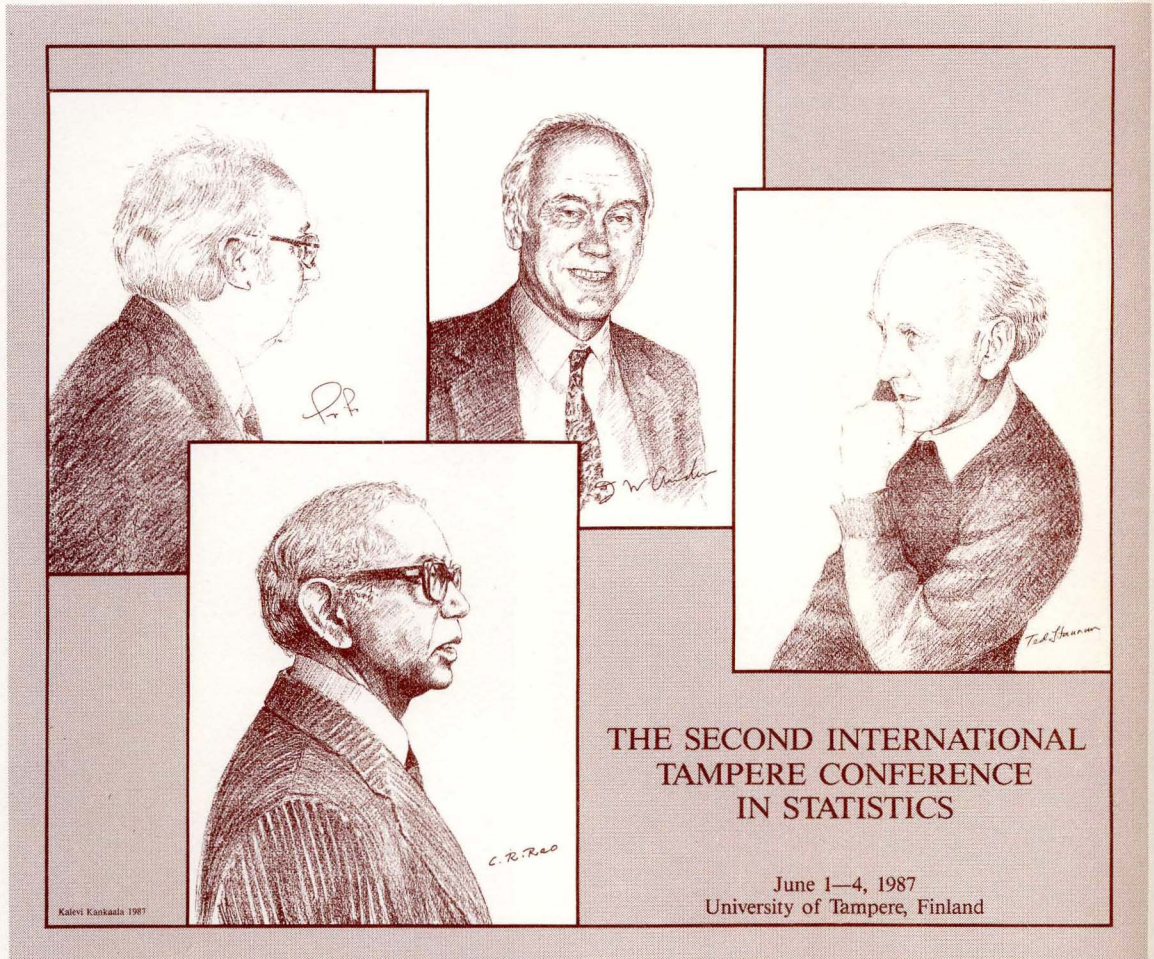


Proceedings of the Second International
Tampere Conference in Statistics



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of the
Second International
Tampere Conference in Statistics

University of Tampere, Tampere, Finland

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Edited by

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PREFACE

The Second International Tampere Conference in Statistics was held at the University of Tampere, Tampere, Finland, from 1-4 June 1987. The conference brought together more than 200 researchers – from 25 different countries – in linear models, multivariate analysis, statistical computing, time series analysis and related themes. This conference continued the spirit kindled by the First International Tampere Seminar on Linear Statistical Models and their Applications that was held at the University of Tampere from August 30 - September 2, 1983.

The conference comprised Plenary Sessions (of keynote addresses with discussion), Invited Talks, and Contributed Papers. The keynote speakers were Professors T.W. Anderson (Stanford, U.S.A.), George E.P. Box (Madison, U.S.A.), E.J. Hannan (Canberra, Australia) and C. Radhakrishna Rao (Pittsburgh, U.S.A. and New Delhi, India). These four statisticians do not need any introduction to the statistical community – their contributions to the development of modern statistical science have indeed been outstanding. It is not only a pleasure to publish their excellent papers in these *Proceedings* but it was also thrilling to meet and visit with these keynote speakers in the various conference activities.

The thanks of the organizers also go to the discussants of the keynote addresses, respectively: Professors Michael D. Perlman (U.S.A.), Stratis Kounias (Greece), Knut Conradsen (Denmark) and C. G. Khatri (India). The invited talks were given by Professors A.C. Atkinson (U.K.), Jerzy K. Baksalary (Poland), Knut Conradsen (Denmark), Takeaki Kariya (Japan), C.G. Khatri (India), Seppo Mustonen (Finland), Michael D. Perlman (U.S.A.), John W. Pratt (U.S.A.), Daryl Pregibon (U.S.A.), Friedrich Pukelsheim (F.R. Germany), Tarmo Pukkila (Finland), Jorma Rissanen (U.S.A), Alastair J. Scott (New Zealand), Bimal K. Sinha (U.S.A.), Terry P. Speed (Australia) and George P.H. Styan (Canada). Special thanks are due to these speakers for their stimulating talks and for preparing such authoritative papers for these *Proceedings*. Professor P.R. Krishnaiah of the University of Pittsburgh, U.S.A., was also an invited speaker but due to serious illness was unable to come: we were deeply saddened to learn that Professor Krishnaiah passed away on 1 August 1987.

Dr. Timo Teräsvirta of the Research Institute of the Finnish Economy (Helsinki) gave the Opening Address of the conference. I am also grateful to Elina Mustonen and University Rector Jarmo Visakorpi for their contributions in the Opening Session.

There were more than 70 speakers in the contributed paper sessions. I wish to thank each of them for their kind cooperation as well as the chairmen of these sessions.

All papers in this volume have been refereed, including all the keynote addresses and invited papers. Exceptionally warm thanks should go to the 140 referees (whose names appear on page 701); the quality of these *Proceedings* is very much due to their unselfish efforts. Of the 48 contributed papers submitted for publication, 30 were accepted for publication and appear in these *Proceedings*.

Many of the papers have been typeset in our Department (using a Xerox Star) and thanks for this typesetting go to Leena Kaunisto, Elisa Lahtinen, Pirjo Larima, Virpi Mäntylä, Tuija Nummi and Marita Raita. We are also grateful to Arto Kallinen for his help with several technical arrangements while preparing this volume.

The conference was organized by a local committee within the Statistics Group of the Department of Mathematical Sciences, consisting of Paula Hietala, Simo Puntanen, George P.H. Styan and myself. Yes, indeed, there is Professor Styan of McGill University in this "local group" – he participated in several long, enthusiastic, and very helpful discussions, taking place in various parts of the world, concerning both this conference and these *Proceedings*.

Also Pentti Huuhtanen, Raija Leppälä and Tapio Nummi very kindly helped with various arrangements. Pirjo Larima deserves very special thanks for her considerable work for the conference during the summer 1987. Thanks also go to Professor Sergio G. Koreisha (University of Oregon) for assistance in planning the sessions during his visit to Tampere in March 1987.

I wish to thank Kalevi Kankaala for preparing the drawings of the four keynote speakers and the associated poster for the conference; this poster is the basis of the dust jacket of these *Proceedings*.

The conference was financially supported by the Ministry of Education of Finland, the University of Tampere and various associations and companies whose names are listed on page VIII. All deserve our warmest thanks for their invaluable support. We are also indebted to the City of Tampere for inviting all participants to a Civic Reception in the Town Hall.

The organizers were also glad to see the active interest shown in the social programme of the conference – particularly by experiencing the sweat in the sauna party in the traditional Finnish way. There was talk while planning for this conference that the organizers were all of a sweat: as it turned out the winter preceding the conference was the coldest in Finland this century.

TARMO PUKKILA

Conference Director

2 November 1987



E.J. Hannan, George E.P. Box, T.W. Anderson



Kalevi Kankaala, Tarmo Pukkila, C. Radhakrishna Rao

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Hotel Ilves

Okobank

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The British Council

CONTENTS

| | |
|---------------|---|
| PREFACE | v |
|---------------|---|

Opening Address

| | |
|---------------------------|---|
| TERÄSVIRTA, Timo | |
| How we got the data | 1 |

Keynote Addresses

| | |
|--|----|
| ANDERSON, T.W. | |
| Multivariate linear relations | 9 |
| Box, George E. P. (Joint work with R. Daniel MEYER) | |
| Some aspects of statistical design in quality improvement | 37 |
| DISCUSSION: KOUNIAS, Stratis | 49 |
| REJOINDER: Box, George E.P. | 52 |
| HANNAN, E. J. | |
| The statistical theory of linear systems | 53 |
| DISCUSSION: CONRADSEN, Knut | 70 |
| RAO, C. Radhakrishna | |
| Estimation in linear models with mixed effects: a unified theory | 73 |
| DISCUSSION: KHATRI, C.G. | 94 |

Invited Papers

| | |
|---|-----|
| ATKINSON, A.C. | |
| Robust regression and unmasking transformations | 99 |
| BAKSALARY, Jerzy K. | |
| Algebraic characterizations and statistical implications of the commutativity of orthogonal projectors | 113 |
| CONRADSEN, Knut (Joint work with Bjarne Kjær NIELSEN) | |
| Textural features useful in classification of digital images | 143 |
| KARIYA, Takeaki | |
| MTV model and its application to prediction of stock prices | 161 |
| KHATRI, C.G. | |
| Quadratic forms and null robustness for elliptical distributions | 177 |
| MUSTONEN, Seppo | |
| Editorial approach in statistical computing | 205 |
| PERLMAN, Michael D. (Joint work with T.W. ANDERSON) | |
| Consistency of invariant tests for the multivariate analysis of variance | 225 |
| PRATT, John W. | |
| Dividing the indivisible: using simple symmetry to partition variance explained | 245 |

| | |
|---|-----|
| PUKELSHEIM, Friedrich | |
| Majorization orderings for linear regression designs | 261 |
| PUKKILA, Tarmo (Joint work with Arto KALLINEN) | |
| On the order determination of time series models | 275 |
| RISSANEN, Jorma | |
| Complexity and information in contingency tables | 289 |
| SCOTT, Alastair J. | |
| Generalized linear models with survey data | 303 |
| SINHA, Bimal K. (Joint work with Rita DAS) | |
| Robust optimum invariant unbiased tests for variance components | 317 |
| SPEED, T. P. | |
| Generalized variance component models | 343 |
| STYAN, George P.H. (Joint work with Robert E. HARTWIG) | |
| Partially ordered idempotent matrices | 361 |

Contributed Papers

| | |
|---|-----|
| ANDERSON, A.J.B. | |
| Fortran8x as a language for statistical computation | 385 |
| BALDESSARI, Bruno | |
| On regression analysis under the intrinsic inference model for stratified dependent normal random variables | 393 |
| BRÄNNÄS, Kurt | |
| Control in the duration model framework | 403 |
| DANIAL, Edward J. and KATTI, S. K. | |
| The asymptotic variances of the necessary and sufficient conditions for the infinite divisibility of discrete distributions through multivariate analysis | 411 |
| DANIAL, Edward J. and KATTI, S. K. | |
| Computing the maximum likelihood estimates of the hyper-Poisson parameters interactively through APL computer language | 417 |
| DIEBOLD, Francis X. and NERLOVE, Marc | |
| Factor structure in a multivariate ARCH model of exchange rate fluctuations | 429 |
| FAREBROTHER, R.W. | |
| Simultaneous confidence intervals when the regressor matrix is unbalanced ... | 439 |
| FEUERVERGER, Andrey | |
| Some Fourier procedures for time domain analysis of parametric and semi-parametric time series models | 445 |
| GELFAND, Alan E. | |
| Estimation of a restricted variance ratio | 457 |
| de GOOIJER, Jan G. and HEUTS, Ruud M.J. | |
| Higher order moments of bilinear time series processes with symmetrically distributed errors | 467 |
| IGNATOV, Z.G. and KAISHEV, V.K. | |
| On the computation of distributions of serial correlation coefficients through B - splines | 479 |

| | |
|--|-----|
| JAJUGA, Krzysztof | |
| Elliptically symmetric distributions and their application to classification and regression | 491 |
| KOLLO, T. | |
| Asymptotic distributions of functions of means and covariances | 499 |
| KONAKOV, V.D. | |
| Nonparametric density estimation: L_∞ approach | 511 |
| KORHONEN, Pekka and NARULA, Subhash C. | |
| On subjectivity in statistics | 521 |
| KOUKOUVINOS, Christos and KOUNIAS, Stratis | |
| Optimal designs in linear models and Hadamard matrices | 531 |
| LATOUR, Dominique, PUNTANEN, Simo and STYAN, George P.H. | |
| Equalities and inequalities for the canonical correlations associated with some partitioned generalized inverses of a covariance matrix | 541 |
| LISKI, Erkki P. | |
| Identifying influential data in a growth curves model | 555 |
| MANLY, Bryan F.J. and McALEVEY, Lynn | |
| A randomization alternative to the Bonferroni inequality with multiple F tests | 567 |
| MEJZA, Stanislaw | |
| Experiments in incomplete split-plot designs | 575 |
| MERIKOSKI, Jorma Kaarlo | |
| Underestimating the largest eigenvalue of a covariance matrix | 585 |
| MILITKÝ, Jiří, KVĚTOŇ, Karel and ČÁP, Jaroslav | |
| Comparison of some influence measures in nonlinear regression | 591 |
| NORDSTRÖM, Kenneth and von ROSEN, Dietrich | |
| Algebra of subspaces with applications to problems in statistics | 603 |
| OSOSKOV, G.A. | |
| Robust regression for the heavy contaminated sample | 615 |
| PYNNÖNEN, Seppo | |
| Selection of variables in nonlinear discriminant analysis by information criteria | 627 |
| SALEM, A.M. and WAHAB, S.A. | |
| On the determination of the amplitude of quasi-stationary phenomena | 637 |
| SCHAFFRIN, Burkhard | |
| Less sensitive tests by introducing stochastic linear hypotheses | 647 |
| SCHALL, Robert and DUNNE, Timothy T. | |
| On outliers and influence in the general multivariate normal linear model | 665 |
| TRENNER, G., STAHLECKER, P., SCHIPP, B. and HERING, F. | |
| Iterative improvements of a partial minimax estimator in regression analysis.. | 679 |
| WERNECKE, K.-D., KALB, G. and STÜRZEBECKER, E. | |
| On classification strategies in medical functional diagnostics | 691 |
| List of Referees | 701 |
| Photographs | 702 |