Program

Tuesday 13/6	14- 15-15.30 15.30-15.45 15.45-16.30	Registration Refreshments Welcome Invited speaker. Chair: Simo Puntanen, Tampere University. Room: 2247 Speaker: Ingram Olkin, Stanford University. Inequalities: Some probabilistic, some matrix, and
	16.45-17.30 18-20	some both. Invited speaker. Chair: George P.H. Styan, McGill University, Montréal Room: 2247 Speaker: Gene Golub, Stanford University Matrices and moments: perturbation for least squares. Get-together
Wednesday 14/6	8.15-9.45	Invited speakers Chair: Hans Joachim Werner, Bonn University. Room: 2247 Speaker #1: Sabine Van Huffel, Katholieke Universiteit Leuven Regularization techniques in model fitting and parameter estimation. Speaker #2: Muni Srivastava, University of Toronto. Multivariate analysis with fewer observations than the dimension: A Review.
	9.45-10.30 10.30-12.10 12.00-13.30 13.30-15.10	Refreshments Contributed sessions, 1&2 (for details see below) Lunch Contributed sessions, 3&4 (for details see below)
	15.30-13.10 15.10-15.45 15.45-17.25 17.35-18.20	Refreshments Contributed session, 5 (for details see below) Invited speaker: Chair: Friedrich Pukelsheim, University of Augsburg
1500,	18.00-20.00	Room: 2247 Speaker: George P.H. Styan, McGill University, Montréal and Simo Puntanen, University of Tampere. A philatelic introduction to matrices and statistics. Mingling and refreshments

8.15-9.45 Invited speakers Chair: Maya Neytcheva, Uppsala University Room: 2247 Speaker #1: Yousef Saad, University of Minnesota The new challenges of numerical algebra Speaker #2: Theodore Anderson, Naoto Kunitomo and Yukitoshi, Matsushita, Stanford University Asymptotic distributions of estimators in *simultaneous equation models with many instruments* 9.45-10.30 Refreshments 10.30-11.10 Invited speaker Chair: Gene Golub, Stanford University Room:2247 Miguel Fonseca, João Tiago Mexia, New University of Lisbon, and Roman Zmyslony, University of Zielona Góra. Least squares and generalized least squares in models with orthogonal block structure. 10.50-11.10 The MathWorks Klaus, Juenemann, The Mathworks, Sweden A practitioners approach to statistical analysis of large data sets using MATLAB and distributed computing. 12.10-13.30 Lunch Prof. Tarmo Pukkila session. 13.30-17.00 Chair: Erkki Liski, University of Tampere Room. 2247 Tarmo Pukkila, Ministry of Social Affairs and Health, Helsinki 13.30-14.15 What kind of research would I carry out at a university? 14.15-14.30 Erkki Liski, University of Tampere Festschrift delivery Sergio G. Koreisha, Lundquist College of Business, University 14:30-14:50 of Oregon A letter of Recommendation for Tarmo Pukkila 15.00-15.45 Refreshments 15.45-17.00 Prof. Tarmo Pukkila session (cont.) George P. H. Styan, McGill University, Montréal. Some 15.45-16.15 comments on the research publications of Tarmo Mikko Pukkila 16.15-17.00 Simo Puntanen, University of Tampere Tarmo Pukkila through a camera 17.15-18.00 Chair: Thomas Mathew, University of Maryland, Baltimore Room: 2247 SPSS Sweden AB Short presentation 18.00-20.00 Mingling and refreshments and/or 19.30visit restaurang IL Forno A Legna (http://www.ilfornoalegna.se/) to celebrate Tarmo Pukkila For participation please inform us via e-mail or at the registration desk not later than 13/6.

Thursday 15/6

Friday 16/6	8.15-9.45	Invited speakers	
Filday 10/0	0.13-7.43	Chair: Muni Srivastava	
		Room: 2247	
		Speaker #1: Åke Björck, Linköping University	
		Bidiagonal decomposition and statistical computing	
		Speaker #2: Friedrich Pukelsheim, University of Augsburg <i>Matrices and Politics</i> Refreshments	
	9.45-10.30		
	10.30-12.10		
	12.10-13.30		
	13.30-	Lunch Excursion + conference dinner in the evening	
	13.30	Bus departure from Polacksbacken	
	13.30 14.15-	•	
	15-16	Guided tour in Sigtuna	
	16.15-		
	10.13- 17-18	Guided tour at Skokloster castle	
	18-	Dinner at Skokloster	
	10-	Diffici at Skokiostei	
Saturday 17/6	8.15-9.45	Invited speakers	
Sucurum 1170	0,10 ,,10	Chair: Ingram Olkin, Stanford University.	
		Room: 2247 Speaker #1: Tomas Mathew, University of Maryla Testing the equivalence of two covariance matrices. Speaker #2: David A. Harville, IBM Thomas J. Watson Research Center. Generalized inverses of partitioned matrices and matrix sums: formulas, proofs, applications, and relationships. Refreshments Contributed session #8 (for details see below) Invited speaker Chair: Dietrich von Rosen, SLU Room: 2247 Speaker: Jeffrey J. Hunter, Massey University, Auckland. Generalized inverses in stochastic modelling. Concluding remarks nch: Organized by the conference. Those who	
	9.45-10.30		
	10.30-12.10		
	12.20-13.05		
	13.05-13.15		
	13.15- Lunch		
		will not participate please inform us.	

Updated: 13.06.2006

Contributed Session #1, 14/6, 10.30 – 12.10

Chair: Jeffrey J. Hunter, Massey University, Auckland.

Room: 2247

Speaker 1 <u>Gregory L. Light</u>, Providence College.

A practitioner's note on a unit-free matrix perturbation analysis.

Speaker 2 Oskar Maria Baksalary, Adam Mickiewicz University, Poznan and

Götz Trenkler, University of Dortmund.

Characterizations of EP, normal and Hermitian matrices.

Speaker 3 Carlos A Coelho, New University of Lisbon.

Matrix potentiation: some of its properties and applications

Speaker 4 Simo Puntanen, Jarkko Isotalo, University of Tampere, and George P. H. Styan,

McGill University, Montréal

On the role of the constant term in linear regression

Speaker 5 Hans Joachim, Werner, University of Bonn

More on Projectors

Contributed Session #2, 14/6, 10.30 – 12.10

Chair: Augustyn Markiewicz, Agricultural University of Poznan

Room: 2446

Speaker 1 Ivana Pultarová

Convergence issues of some classes of IAD methods in computing Markov chains.

Speaker 2 Anna Tchirina

Large deviations and exact Bahadur efficiency of the Lilliefors test of exponentiality.

Speaker 3 Radim Blaheta, Petr Byczanski, Institute of Geonics AS CR, Ostrava, and Marie

Blahetova, Technical University of Ostrava.

A fully algebraic AMLI method and solution of material microstructure problems.

Speaker 4 Silvelyn Zwanzig, Uppsala University.

Why do the simulation extrapolation procedures work in EIV?

Speaker 5 Petr Mayer, Czech University of Technology.

Computing mean first passage times matrices by columns

Contributed Session #3, 14/6, 13.30 – 15.10

Chair: Erkki Liski, University of Tampere

Room: 2247

Speaker 1 Ricardo Covas, Polytechnic Institute of Tomar, and Joao Tiago Mexia, New University of Lisbon.

Inference for random effects models associated to commutative Jordan algebras

Speaker 2 <u>Katarzyna Filipiak</u> and Anna Szczepanska, Agricultural University of Poznan. Optimal designs under the polynomial growth curve models.

Speaker 3 Augustyn Markiewicz, Agricultural University of Poznan. Kiefer optimal designs in multivariate linear models.

Speaker 4 Märt Möls, University of Tartu, Simo Puntanen and Jarkko Isotalo, University of Tampere.

BLUE or BLUP - question about model or about estimator properties?

Speaker 5 <u>Jarkko Isotalo</u>, Simo Puntanen, University of Tampere, and George P. H. Styan, McGill University, Montréal, Québec.

Further characterizations of linear sufficiency for a given parametric function in the general Gauss--Markov model

Contributed Session #4, 14/6, 13.30 – 15.10 Chair: Götz Trenkler, University of Dortmund Room:2446

Speaker 1 <u>Sven Ahlinder</u>, Volvo. *Prediction ability for PLS*.

Speaker 2 <u>Júlia Volaufová</u> and Lynn R LaMotte, Louisiana State University Health Sciences Center. *Variable selection issues in generalized linear models.*

Speaker 3 Antti Liski and Reijo Sund, National Research and Development Centre for Welfare and Health, Helsinki.

A generalized propensity score approach to comparing the costs of health care Episodes.

Speaker 4 <u>Hukum Chandra</u>, and Ray Chambers, University of Southampton. Small area estimation with skewed data.

Speaker 5 Eric Iksoon Im, College of Business and Economics, Hawaii.

Non-normality of significance test statistic in adaptive regression model.

Contributed Session #5, 14/6, 15.45 – 17.25

Chair: David A. Harville, IBM Thomas J. Watson, Research Center.

Room: 2247

Speaker 1 <u>Kateryna Mishchenko</u>, Mälardalen University, Lars Rönnegård, Örjan Carlborg and Sverker Holmgren, Uppsala Uiversity

Numerical methods for the REML method in genetic analysis of complex traits

Speaker 2 Tõnu Kollo, <u>Anu Roos</u>, University of Tartu, and Dietrich von Rosen, SLU. *Elliptical K-N distributions*.

Speaker 3 Nicklas Korsell, University of Uppsala.

A note on the inertia of sum--of--squares matrices in linear models.

Speaker 4 Kristi Kuljus, University of Uppsala

The diagonal elements of a projection matrix

Speaker 5

Contributed Session #6, 16/6, 10.30 – 12.10 Chair: Yousef Saad, University of Minnesota

Room: 2247

Speaker 1 Tomasz Szulc, Adam Mickiewich University, Poznan, and Ludwig Elsner, University of Bielefeld.

Criteria for block \$P\$-property.

Speaker 2 Lennart Bondesson, University of Umeå, and Imbi Traat, University of Tartu. Eigenvalues and eigenvectors of a special nonsymmetric matrix.

Speaker 3 Lynn R. LaMotte, Louisiana State University Health Sciences Center.

Linear algebra simplifies derivation of K. Pearson's chi-squared statistic for frequency distributions.

Speaker 4 Stephen Haslett, Massey University, and John Haslett, Trinity College. Equivalence of BLUEs and of BLUPs and the role of stochastic constraints

Speaker 5 <u>Tatjana Nahtman</u>, Tartu University; Karolinska Institutet, and Dietrich von Rosen, SLU

Shift invariant permutations in linear random factor models

Contributed Session #7, **16/6**, **10.30 – 12.10** Chair: Åke Björck, University of Linköping

Room: 2446

Speaker 1 Torsten Söderström, Uppsala University.

Extending the Frisch scheme for dynamic errors-in-variables

problems to correlated output noise.

Speaker 2 Edward J. Godolphin, Royal Holloway University of London.

An invariance property of the Fisher information matrix for time series models.

Speaker 3 Gupta, A. K., Bowling Green State University,

Kollo, T. and Selart, A., University of Tartu

On the joint distribution of a linear and a quadratic form in skew normal variables.

Speaker 4 Sanjay Chaudhuri, National University of Singapore, and Michael D. Perlman,

University of Washington.

Testing equality of multivariate normal populations with recursive graphical Markov

Structure.

Speaker 5 <u>Jaakko Nevalainen</u>, University of Tampere, Denis Larocque, HEC Montréal and

Hannu Oja, University of Tampere.

Multivariate sign test and spatial median for clustered data.

Contributed Session #8, 17/6, 10.30 – 12.10

Chair: Theodore Anderson, Stanford University

Room: 2247

Speaker 1 Solomon W. Harrar, South Dakota State University, Eugene Seneta, University of

Sydney, and Arjun K. Gupta, Bowling Green State University.

Duality between matrix variate \$t\$ and matrix variate V.G. distributions.

Speaker 2 Kajsa Ljungberg and Sverker Holmgren, University of Uppsala

Efficient evaluation of the residual sum of squares for quantitative trait locus

mapping in the case of complete marker genotype information

Speaker 3 Arne Bathke, University of Kentucky, and Solomon Harrar, South Dakota State

University.

Nonparametric methods in multivariate factorial designs.

Speaker 4 Nils Lehmann, University of Duisburg-Essen

Principal components selection based on random matrix theory

Speaker 5