

MAT-TRIAD 2007 – three days full of matrices

Będlewo, Poland, 22-24 March 2007

<http://mtriad07.amu.edu.pl/>

Preliminary program – speakers and talk titles

Thursday, 22.03.2007

8:00 – 8:45 Breakfast

8:45 – Opening

Session I (LA)

9:00 – 9:40 – *L. Elsner*: On Hessenberg matrices and their generalizations

9:45 – 10:05 – *I. Gimenez*: On singular and nonsingular H-matrices

10:05 – 10:25 – *V. Kostic*: New results on subdirect sums of S -strictly diagonally dominant matrices

10:25 – 10:40 – Coffee Break

Session II (LA)

10:40 – 11:20 – *J.M. Pena*: On bounds and localization results for the eigenvalues of structured matrices

11:25 – 11:45 – *V. Cortes*: Pivoting strategies and growth factor

11:45 – 12:00 – Coffee break

Session III (LA)

12:00 – 12:20 – *M. Kovacevic*: Some invariants of Schur complement derived from scaling approach

12:20 – 12:40 – *B. Ricarte*: The positive realization problem in normal transfer matrices with simple real poles

12:40 – 13:00 – *F. Pedroche*: Characterization of α -matrices

13:00 Lunch

Session IV (LA)

15:00 – 15:40 – *S. Rump*: Toeplitz structured perturbations

15:45 – 16:05 – *D. von Rosen*: Singular structured matrix with integer spectrum

16:05 – 16:20 – Coffee break

Session V (Stat.)

16:20 – 16:50 – *C. Coelho*: Testing for structure in covariance matrices

16:50 – 17:10 – *P. Druilhet*: A statistical interpretation of Krylov subspaces decomposition

17:10 – 17:30 – *A. Michalski*: On using generalized Cramer-Rao inequality to REML estimation in linear models

17:30 – 17:45 – Coffee Break

Session VI (Stat.)

17:45 – 18:25 – *S. Puntanen*: A conversation with Sujit Kumar Mitra in 1993 and some comments on his research publications

18:25 – 19:15 – *G.P.H. Styan*: A philatelic introduction to matrices and magic squares

19:30 Dinner

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Friday, 23.03.2007

8:00 – 9:00 Breakfast

Session VII (Stat.)

9:00 – 9:40 – *F. Pukelsheim*: The European Parliament election in the Treaty on a Constitution for Europe: An electorate of degressive valencies

9:45 – 10:05 – *P. Jiraneck*: On the limiting accuracy of segregated saddle point solvers

10.05 – 10.25 - *T. Ostrowski*: On properties of special saddle point matrices

10:25 – 10:40 – Coffee Break

Session VIII (Stat.)

10:40 – 11:20 – *D.A. Griffith*: A numerical study of planar and near-planar adjacency matrices used in geographical analysis

11:25 – 11:45 – *F.J. Marques*: Near-exact distributions for testing the equality and sphericity of several covariance matrices: the multisample sphericity test

11:45 – 12:00 – Coffee break

Session IX (Stat.)

12:00 – 12:40 – *T. Klein*: Loewner comparability of moment matrices in cubic mixture models

12:45 – 13:05 – *E. Liski*: Model averaging for linear regression

13:10 Lunch

Session X (LA & Stat.)

15:00 – 15:20 – *F. Blömeling*: MLS model reduction for second-order time-invariant dynamical systems

15:20 – 15:40 – *W. Tadej*: Continuous affine families of unitary Hadamard matrices

15:40 – 16:00 – *M. Ohlson*: Distributions of quadratic forms

16:00 – 16:20 – *M. Grządziel*: On determinant maximization with linear matrix inequality constraints and REML estimators of variance components

16:20 – 16:50 – Coffee Break – Poster session:

R. Różański, A. Szczepańska, M. Beim

Session XI: Statistics and Linear Algebra in Practice

16:50 – 17:10 – *S. Galas* (Glaxo): Responsible for evaluating process capability and implementing statistical methods in the Site

17:10 – 17:30 – *H. Michalska* (Glaxo): Responsible for measurement systems improvement and implementing Lean Manufacturing

17:30 – 18:00 – *J. Jackowski* (Glaxo): Six Sigma. What Employers Need - Discussion

18:00 – 18:15 – Coffee break

18:15 – 18:40 – *A. Liski*: A propensity score approach to comparing costs between hospital districts

18:40 – 19:05 – *A. Dąbrowski*: Process monitoring based on multivariate statistical analysis

19:05 – 19:15 – Discussion

19:30 Conference Dinner - Banquet speaker: Simo Puntanen

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Saturday, 24.03.2007

8:00 – 9:00 Breakfast

Session XII (LA)

9:00 – 9:40 – *C.R. Johnson*: Possible Jordan Structures for A, B, and C, when $C = AB$

9:45 – 10:05 – *Z. Woźnicki*: The solution of continuous-time algebraic Riccati equations by means of the SOR-LIKE method

10:05 – 10:25 – *D. Kubalińska*: Interpolation based model reduction

10:25 – 10:40 – Coffee Break

Session XIII (LA)

10:40 – 11:20 – *G. Trenkler*: On the distance and the angle of subspaces

11:25 – 11:45 – *O.M. Baksalary*: Further properties of a pair of orthogonal projectors

11:45 – 12:00 – Coffee break

Session XIV (LA)

12:00 – 12:20 – *A. Smoktunowicz*: How and how not to compute the Moore-Penrose inverse

12:20 – 12:40 – *I. Wróbel*: Numerical ranges in a strip

12:40 – 13:00 – *K. Vehkalahti*: Enhancing the documentation by leaving useful traces

13:00 Lunch

Session XV (LA)

15:00 – 15:40 – *R. Bru*: On incomplete decompositions of inverses

15:45 – 16:05 – *P. Batra*: Infinite matrices - computable stability conditions for time-delay systems

16:05 – 16:25 – *A. Suchocka*: Incomplete alternating projection method for large inconsistent linear systems

16:25 – 16:40 – Coffee Break

Session XVI (Stat.)

16:40 – 17:20 – *J.T. Mexia / M. Fonseca*: Canonical forms for factorial and related models

17:25 – 17:45 – *F. Carvalho*: Canonic inference and commutative orthogonal block structures

17:45 – 18:00 – Coffee Break

Session XVII (Stat.)

18:00 – 18:40 – *R. Zmyślony*: Jordan algebra and statistical inference in linear mixed models

18:45 – 19:05 – *R. Covas*: Lattices of commutative Jordan algebras, remarks and some applications

19:05 – 19:15 – **Closing**

19:30 Dinner – Prize ceremony