

PLS'01 Scientific Programme

Sunday, September 30th

17:00 – 19:00 **Registration Desk** open at Capri Palace Hotel

19:00 **Welcoming Cocktail**

Monday, October 1st

8:00 – 8:30 **Registration Desk** open at Capri Palace Hotel

8:45 – 9:00 **Opening Ceremony**

9:00 – 10:30 *Invited papers session 1*

PLS and Related Methods for Large Data Sets

Nouna Kettaneh-Wold, Svante Wold

PCA and PLS with Very Large Data Sets

Bovas Abraham, Giovanni Merola

Dimensionality Reduction Approach to Multivariate Prediction

10:30 – 11:00 **Coffee Break**

11:00 – 12:30

Invited papers session 2

Weighting Predictors and Objects and Signal Correction in PLS

Michele Forina, Eva M. Almansa

Weighting Predictors and Objects in PLS

Sijmen de Jong

(Direct) Orthogonal Signal Correction: Comparison of Old and New Algorithms

12:30 – 14:30

Time for Lunch

14:30 – 16:30

Contributed papers session 1

New PLS-based Methods and Algorithms

Vincenzo Esposito Vinzi, Michel Tenenhaus

PLS Logistic Regression

Philippe Bastien, Michel Tenenhaus

PLS Generalised Linear Regression: Application to the analysis of life time data

Cristian Preda, Gilbert Saporta

PLS regression on a stochastic process

Michele Gallo

Partial Least Squares for Compositional Data

Baibing Li, Per A. Hassel, Elaine B. Martin, A. Julian Morris
A Non-linear Nested PLS Algorithm

Ruy L. Milidiú, Raúl P. Rentería
DPLS and PPLS: Two PLS Algorithms for Large Data Sets

16:30 – 17:00 ***Coffee Break***

17:00 – 18:40 *Contributed papers session 2*

Topics related to Multivariate Analysis

E.M. Qannari, H. Nocairi, D. Bertrand, E. Vigneau
Discrimination and classification with multi-collinear data

Vartan Choulakian
*Robust Multivariate Analysis Based on the Stahel-Donoho
Outlyingness Measure*

Joe Whittaker
*A Graphical View of Multivariate Statistics with reference to
Financial Risk*

Juan I. Modroño Herrán, Karmele Fernández Aguirre, M. Isabel
Landaluce Calvo
*A Multivariate Two Step Method for Tables of Categorical
Variables*

Letizia La Tona

Jackknife Significance Tests on Scale Parameters of the L_p -norm Distributions

17:00 – 19:00

Contributed papers session 3 – taking place in Sala Monte Solaro
PLS Industrial Applications

M.C. Ortiz, L.A. Sarabia, A. Herrero, M.S. Sánchez, M.B. Sanz,
M.E. Rueda, D. Giménez, M.E. Meléndez

*Determination of Capability of Detection according to ISO Norm
with Soft Calibration Methods*

Qiang Liu, Huiwen Wang

*Variable Screening by Using Partial Least-Squares Analysis for
Cutting Tool Wear Modeling*

Aasmund Rinnan

Alternative regression method to PLS on NMR-relaxation curves

Lopes J.A., Menezes J.C.

*Industrial Fermentation End-Product Modelling with Multilinear
PLS*

B.M. Beckwitt-Hall, J.T. Brindle, R. Barton, M. Coen, E. Holmes,
J.K. Nicholson, H. Antti

*Application of Orthogonal Signal Correction to Minimise the
Effects of Physical and Biological Variation in High Resolution 1H
NMR Spectra of Biofluids*

C.L. Gavaghan, S.T. Hadfield, S. Hole, E. Holmes, P.W.A. Howe,
P.D. Stanley, J.K. Nicholson

*Application of NMR-Based Metabonomics to the Investigation of
Salt Stress in Maize (Zea mays)*

Tuesday, October 2nd

9:00 – 10:30 *Invited papers session 3*

PLS for the Analysis of Quality and Sensory Science Data

Harald Martens, Magni Martens

Multivariate Analysis of Quality

Garnt Dijksterhuis, Harald Martens, Magni Martens

*GP-PLSR: An Integrated Technique for Analysing Sensory
Science Data*

10:30 – 11:00 ***Coffee Break***

11:00 – 12:30 *Invited papers session 4*

PLS Issues in Chemometrics

D.L. Massart

Diagnostics for Application of PLS in Multivariate Calibration

For this talk, please refer to the following papers in the Proceedings:

J.A. Fernández Pierna, L. Jin, M. Daszykowski, B. Walczak, F. Wahl, D.L. Massart

Inhomogeneity Detection in Prediction with PLS

S. Gourvénec, J.A. Fernández Pierna, D.L. Massart, D.N. Rutledge

A comparison between PoLiSh-Smoothed PLS regression and Monte Carlo Cross-Validation

Øyvind Langsrud, Tormod Næs

Optimised Score Plot by Principal Components of Predictions

12:30 – 14:30 ***Time for Lunch***

14:30 – 16:10 *Contributed papers session 4*

Validation, Variables Selection and Subspace Identification in PLS

Huiwen Wang, Qiang Liu, Yongping Tu

Identification of Optimal Subspace from PLS Regression

L.A. Sarabia, M.C. Ortiz, M.S. Sánchez, A. Herrero

Dimension-Wise Selection in Partial Least Squares Regression with a Bootstrap estimated Signal-Noise relation to Weight and Loadings

Martin Hoy, Harald Martens, Age Smilde

Removing the Effect of Different Subspaces in Jack-knifed Estimates of PLSR Uncertainty

Silvano Amato, Vincenzo Esposito Vinzi

Cross validated \hat{Q}_{kh}^2 bootstrap distribution estimate for the choice of significant components in Partial Least Squares Regression

Andrea R. Beccari, Benedetto Torrisi

New Statistical Methodology for Variable Selection: a chemometric application

16:10 – 20:00 *Free Time*

20:00 *Gala Dinner*

Wednesday, October 3rd

9:00 – 10:30 *Invited papers session 5*

Theoretical Aspects and Statistical Properties of PLS

Inge Helland

Rotational Symmetry, Model Reduction and Optimality of Prediction from the PLS Population Model

Aloke Phatak, Frank de Hoog

PLS, Conjugate Gradients, and Lanczos Methods

10:30 – 11:00 *Coffee Break*

11:00 – 12:00 *Specialised Session on:*

Multi-Block PLS Methods

Age K. Smilde, Johan A. Westerhuis

A Framework for Multiblock Component Models

Vibeke T. Povlsen, Connie Benfeldt

Application of Multiblock PLSR in the Dairy Industry

Frans van den Berg

Multi-Block PLSR models in Food Technology

12:00 – 13:00 *Contributed papers session 5*

Issues in PLS Approach

So Young Sohn, Jeong Hoon Park

Comparing PLS with ML in estimating structural equation model

Mohamed Hanafi

Iterative Procedure of the PLS B estimation algorithm: two alternative convergent procedures

G. Vittadini, P.G. Lovaglio

The estimate of latent variables in a structural model: an alternative approach to PLS

13:00 – 13:15 *Closing Ceremony*

13:15 – 15:00 *Time for Lunch*

starting at 15:00 *Guided Excursion*