PLS and Related Methods
for cutting-edge Research in Experimental Sciences
Methodological Advances and Challenging Applications

SUPELEC (Gif-sur-Yvette, France)
10-11 May 2010   9h30-18h00

10 May 2010

| Day 1 |

9h30	**Arrival of participants: Welcome Coffee & Croissants**
9h50	Welcome address

Facing the Real World: Recent Advances and Critical Issues of PLS Methods
*Chair: **Vincenzo Esposito Vinzi***

10h00-10h45	Johan Trygg (Institute of Chemistry - Umeå University, Sweden) *Role of Chemometrics and PLS methods in Personalized medicine - Opportunities and methodological challenges to transform the delivery of healthcare*
10h45-11h30	Gilbert Saporta (Chaire de Statistique appliquée - CEDRIC-CNAM, France) *PLS Regression for functional data*
11h30-12h15	Anne Laure Boulesteix (IBE - University of Munich, Germany) *PLS for prediction with high-dimensional -omics data: overview and critical issues*
12h15-14h00	**Lunch (served at the *SUPELEC Cantine*)**

SPARSE Partial Least Squares Regression
*Chair: **Arthur Tenenhaus***

14h00-14h45	Sunduz Keles (University Of Wisconsin, USA) *Sparse Partial Least Squares: Theory and Applications*
14h45-15h30	Kim-Anh Le Cao (The University of Queensland, Australia) *PLS extensions for integration and variable selection, application to high throughput biological data*
15h30-16h00	Edouard Duchesnay (NEUROSPIN, CEA-Saclay Center, France) *Bridging the gap between imaging and genetics with sparse PLS*
16h00-16h30	**Coffee Break**

Further Topics in Causal Networks: Categorical Data and Bayesian Networks
*Chair: **Laura Trinchera***

16h30-17h10	Giorgio Russolillo (Chaire de Statistique appliquée - CEDRIC-CNAM, France) *The Non-Metric Partial Least Squares Approach*
17h10-17h50	Lionel Jouffe (Bayesia, France) *Probabilistic Structural Equations with Bayesian Belief Networks - Principles and Applications*

SFdS
SOCIETE FRANÇAISE DE STATISTIQUE

ESSEC
BUSINESS SCHOOL
PARIS-SINGAPORE

Supélec

ESSEC-SUPELEC Research Workshop Series on
"PLS (Partial Least Squares) Developments"
Workshop #4

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11 May 2010

| Day 2 |

9h30   **Arrival of participants: Welcome Coffee & Croissants**

PLS Path Modeling as a General Framework for Multi-block Data Analysis
Chair: Arthur Tenenhaus

10h00-10h45   Michel Tenenhaus (HEC Paris, France)
A PLS approach to regularized generalized canonical correlation analysis

10h45-11h30   Vincenzo Esposito Vinzi (ESSEC Business School, France)
Giorgio Russolillo (Chaire de Statistique appliquée - CEDRIC-CNAM, France)
Laura Trinchera (SUPELEC, France)
An integrated PLS Regression-based approach for multidimensional blocks in PLS Path Modeling

11h30-12h15   Mohamed Hanafi (ENITIAA-INRA, France)
Some Computational Results related to PLS PM and Multiblock methods

12h15-14h00   **Lunch (served at the *SUPELEC Cantine*)**

Kernel Partial Least Squares
Chair: Michel Tenenhaus

14h00-14h45   Nicole Kramer (Weierstrass-Institute Berlin, Germany)
Conjugate Gradient Regularization – a Statistical Framework for Partial Least Squares Regression

14h45-15h30   Arthur Tenenhaus (SUPELEC, France)
Kernel Generalized Canonical Correlation Analysis

15h30-16h00   **Coffee Break**

16h00-16h40   Philippe Bastien (L'Oréal Research, France)
Some algorithmic aspects of PLS and Kernel PLS regression with extension to PLS Cox regression

The PLS World in the XLSTAT Data Analysis Environment
16h40-17h10   Emmanuel Jakobowicz (XLSTAT - Addinsoft, France)
Advanced topics in PLS Path Modeling using XLSTAT

17h10   **Closing address and ..... see you in 2011 for the Workshop #5!!!**

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10-11 May 2010   **9h30-18h00**

REGISTRATION FORM

Last name			Title	
First name(s)				
Institution/Company				
Street/P.O.Box				
Postal Code		City	Country	
Phone			Fax	
E-mail				

❏ I will attend the PLS Workshop #4 at SUPELEC on **10-11 May 2010** (free)

❏ I will have lunch at the *"SUPELEC Cantine"* (**25.00 Euros** to be paid on site) on 10 May

❏ I will have lunch at the *"SUPELEC Cantine"* (**25.00 Euros** to be paid on site) on 11 May

❏ I will not be able to attend this Workshop but I like to be informed on the next ones

Date _____   Signature _____

Please fill in and return this form to:

Dr. Laura TRINCHERA
via e-mail (**laura.trinchera@supelec.fr**) or fax (**+33 1 69 85 14 29**)
by no later than 26 APRIL 2010

This workshop is run under the scientific sponsorship of the Société Française de Statistique
and its Group on Data Mining et Apprentissage