Wednesday July 24th

Morning session

9.30 - 10.00: Welcome coffee and foreword

10.00 - 10.45: A. Conn (IBM T. J. Watson Research Center, USA)

Some Challenging Practical Problems in Optimization

10.45 - 11.30: J. Moré (Argonne National Laboratory, USA)

Do You Trust Your Algorithms ?

11.30 - 12.15: J. Dennis (Rice University, USA)

Reasons to Study Derivative-Free Algorithms

Afternoon session

14.00 - 14.30: S. Gratton (IRIT and University of Toulouse, France)

The ADTAO Project on Variational Data Assimilation

14.30 - 15.00: L. Berre (Météo-France, France)

Variational and Ensemble Data Assimilation at Météo-France

15.00 - 15.30: A. Weaver (CERFACS, France)

Covariance Modelling and Minimization for Variational Ocean Data Assimilation

15.30 - 16.00 : Coffee break

16.00 - 16.30 : Ph. L. Toint (University of Namur, Belgium)

Inexact Range Space Methods

16.30 - 17.00 : O. Talagrand (Ecole Normale Supérieure, Paris, France)

Optimization for Bayesian Estimation. The case of Variational Assimilation of Meteorological Observation

17.00 - 17.30: M. Fisher (European Centre for Medium-Range Weather Forecasts, Reading, UK)

Parallelising 4D-Var using a Saddle Point Formulation

Thursday July 25th

Morning session

9.00 - 9.45: S. Wright (University of Wisconsin-Madison, USA)

Randomized Algorithms in Optimization

9.45 - 10.30: K. Scheinberg (Lehigh University, USA)

Probabilistic Model Based Derivative Free Methods

10.30 - 11.00 : Coffee break

11.00 - 11.45: L. N. Vicente (University of Coimbra, Portugal)

Global Rates for Zero-Order Methods

11.45 - 12.30: S. Bellavia (University of Florence, Italy)

Levenberg-Marquardt and Other Regularisations for Ill-posed Nonlinear Systems

Afternoon session

14.00 - 14.45: M. Saunders (Stanford University, USA)

CG versus MINRES on Positive Definite Systems

14.45 - 15.30: B. Morini (University of Florence, Italy)

Preconditioner Updates for Solving Sequences of Indefinite Linear Systems in Optimization

15.30 - 16.15: A. Sartenaer (University of Namur, Belgium)

Using Spectral Information to Precondition Saddle-Point Systems

16.15 - 17.00 : Coffee break

17.00 - 17.30: Z. Zhang (University of Coimbra, Portugal)

A Subspace Decomposition Framework for Nonlinear Optimization: Global Convergence and Global Rates

17.30 - 18.00: Y. Lucet (The University of British Columbia, Canada)

Derivative-Free Optimization via Proximal Point Methods

Friday July 26th

Morning session

9.30 - 10.15: D. Goldfarb (Columbia University, USA)

Low-rank Tensor Recovery: Theory and Algorithms

10.15 - 11.00: J. Nocedal (Northwestern University, USA)

Inexact Second-Order Methods for Machine Learning

11.00 - 11.45: M. Powell (University of Cambridge, UK)

A Fast Method for Generating Trust Region Steps subject to Linear Constraints

Afternoon session

13.00 - 13.45: Ya-xiang Yuan (Chinese Academy of Sciences, China)

An Augmented Lagrangian Trust Region Method for Equality Constrained Optimization

13.45 - 14.30: A. Griewank (Humboldt University, Berlin, Germany)

Nonsmooth optimization and equation solving via algorithmic piecewise linearization

14.30 - 15.15: M. Kocvara (University of Birmingham, UK)

Introducing PENLAB, an MATLAB Code for Nonlinear (and) Semidefinite Optimization

15.15 - 15.45 : Coffee break

15.45- 16.15 : S. Felix (Orange Labs and COATI (INRIA/CNRS/UNS), France)

Optimizing City Traffic using Time-Expanded Graphs