

# One-day symposium on Optimization and Engineering May 24 – Louvain-la-Neuve



#### WELCOME

### 9:10-10:40

9:00

(Bio)-mechanical engineering applications of convex optimization

Bram DEMEULENAERE (KUL/MECH)

Optimization of multibody systems

Jean-François COLLARD AND Paul FISETTE (UCL/MECA)

Solving lower/upper bound approaches of limit analysis by an interior-point method for convex programming *Franck PASTOR* (FUSL)

## 10:40-11:00

### COFFEE BREAK

#### 11:00-12:00

#### **PLENARY TALK**

Optimization methods for variational data assimilation into ocean models Serge GRATTON (CERFACS)

## 12:00-12:30

Optimization based on evolutionary algorithms for aeronautics Rajan Filomeno COELHO (CENAERO)

**12:30–14:00 LUNCH** (at the *Fleur de Sel* restaurant)

### 14:00 - 15:30

Simulation and optimization of a shipbuilding workshop

Frédéric BAIR (ULG/ANAST)

Mixed integer models for naval structure optimization

Maud BAY (ULG/ROGP)

Designing a new distribution strategy for a low-value goods producer: a practicalsolution for the inventory routing problemEl-Houssaine AGHEZZAF (Ghent)

# 15:30-15:50

## COFFEE BREAK

## 15:50-17:20

Optimizing future wireless communication systems

Jonathan DUPLICY (UCL/ELEC)

- Development of an algorithm for solving mixed integer and nonconvex problems arising in electrical supply networks *Emilie WANUFELLE* (FUNDP)
- Use of genetic algorithm for designing redundant sensor network

*Carine GERKENS* (ULG/LASSC)

## 17:20

#### **CLOSING WORDS**

Symposium will take place at CORE, voie du Roman Pays, 34, B-1348 Louvain-la-Neuve, room b-135. Registration before May 17 required: send name, affiliation & address to mauroy@core.ucl.ac.be More details (abstracts, maps) available on http://www.orbel.be/workshops/opteng06/