NIDISC 2011 Program

8 :30 - 8 :40 - NIDISC Opening

8 :40 - 10 :00 - Session 1 : Swarm Intelligence – Chair : Dr. Grégoire Danoy

- **Parallelization Strategies for Ant Colony Optimisation on GPUs**

Jose M. Cecilia, Jose M. Garcia, Manuel Ujaldon, Andy Nisbet and Martyn Amos

- **Multiple Particle Collision Algorithm applied to Radiative Transference and Pollutant Localization Inverse Problems**

Eduardo Favero, Pacheco da Luz, Jose Carlos Becceneri and Haroldo Fraga de Campos Velho

- **A Shared-Memory ACO-Based Algorithm for Numerical Optimization**

Peter Korosec, Jurij Silc, Marian Vajtersic and Rade Kutil

- **Ant Colony Optimization for Route Planning Using Link Travel Time Predictions**

Rutger Claes and Tom Holvoet

10 :00 – 10 :30 Coffee Break

10 :30 – 11 :50 – Session 2 : Modern metaheuristics and real-world applications - Chair : Prof. El-Ghazali Talbi

- **Nature-Inspired Evaluation of Data Types for Trust Management in MANETs**

Marcin Seredynski and Pascal Bouvry

- **Use of Meta-Heuristics for Design of Fuel Loading Pattern in Light Water Reactors Comprising Some Radial and Axial Heterogeneities**

Jean-Michel Do, Jean-Jacques Lautard, Anne-Marie Baudron, Siegfried Douce and Gilles Arnaud

- **A Genetic Algorithm with a Penalty Function in the Selective Travelling Salesman Problem on a Road Network**

Anna Piwonska and Franciszek Seredynski

- **Adaptive Neighborhoods for Cellular Genetic Algorithms**

Bernabe Dorronsoro and Pascal Bouvry

11 :50 – 13 :40 - LUNCH

13 :40 – 15 :00 - Session 3 : Parallel metaheuristics and large –scale problems – Chair : Prof. Pascal Bouvry

- **Multi-Environmental Cooperative Parallel Metaheuristics for Solving Dynamic Optimization Problems**

Mostepha Redouane Khouadjia, Briseida Sarasola, Enrique Alba, Laetitia Jourdan and El-Ghazali Talbi

- **An energy-efficient kernel framework for large-scale data modeling and classification**

Paul D. Yoo, Jason W. P. Ng and Albert Y. Zomaya

- **On the Resilience of [distributed] EAs against Cheaters in Global Computing Platforms**

Sebastien Varrette, Emilia Tantar and Pascal Bouvry

- **Hybrid MPI/OpenMP Strategy for Biological Multiple Sequence Alignment with DIALIGN-TX in Heterogeneous Multicore Clusters**

Emerson de Araujo Macedo, Alba Cristina Magalhaes Alves de Melo, Gerson Henrique Pfitscher and Azzedine Boukerche