

## Monday

9.00 - 10.30

Introduction to the seminar

Introduction to the participants (2 min each)

10.30 - 11.00 Coffee

11.00 - 11.30

*Reserve Slot*

11.30 - 12.00

**Toby Walsh:** Correlation Constraints and their application to Security Games and Rank Aggregation (has to be on Monday)

Lunch

13.45 - 18.00 **Frameworks/languages** (Coordinated by Luc De Raedt)

**Benjamin Negrevergne/Tias Guns/Siegfried Nijssen:** Relational CP

**Marc Denecker:** Constraint solving with extensions of classical logic

**Francesca Rossi:** probabilistic CP\_nets

**Vijay A. Saraswat:** Timed, Probabilistic (concurrent) constraint programming

**Randy Goebel.** Classes of constraints within a high level model of constraint optimization.

## Tuesday

9.00 - 12.00 **Algorithm Configuration** (Coordinated by Barry O'Sullivan)

**Holger Hoos:** Analysing and Automatically Optimising the Empirical Scaling of Algorithm Performance

**Lars Kotthoff:** algorithm selection benchmark data set at <http://aslib.net>.

**Frank Hutter:** Modelling and Optimization of Empirical Algorithm Performance

**Alan Frisch :** *further discussion on this*

Lunch

13.45 - 18.00 **Constraints in pattern mining** (Coordinated by Siegfried)

**Tias Guns:** MiningZinc; can also be seen as a framework.

**Jean-Francois Boulicaud:** Constraint-based mining and expert

models: preliminary ideas

**Bruno Cremilleux:** On Preference-based (soft) pattern sets

**Lakhdar Sais:** Building bridges between data mining and constraint programming

**Thi-Bich-Hanh Dao, Christel Vrain:** Distance-Based Constrained clustering by Constraint programming

**Luc De Raedt,** Constraint-based queries for Bayesian networks

## Wednesday

9.00 - 9.30 **Application**

**Yuzuru Tanaka:** Exploratory Visual Analytics of Big Data from Complex System of Systems such as Personalized Medicine and Urban-Scale Winter Road Management

9.30-12.00 **Learning Constraints** (Coordinated by Michele)

**Michele Sebag.** Estimating the value of (sets of) constraints

**Andrea Passerini.** Structured learning modulo theories

**Arno Siebes:** Constraints to Specify Data

Lunch

Afternoon : excursion

## Thursday

9.00 -9.30 **Application**

**Ken Brown:** Learning and optimising in home energy management

9.30-12.00 **Machine learning** (Coordinated by Barry)

**James Cussens:** demo for BN learning software GOBNILP

**Kristian Kersting:** Relational Linear Programming

**Ian Davidson:** New and emerging uses of constraints in transfer and active learning.

**Hendrik Blockeel :** Declarative modeling

Lunch

13.45 - 15.30

Big Data (Barry)

Human in the Loop / Learning and optimisation (Michele)

16.00 - 17.45

Modelling languages (Ian and Luc)

Meta-algorithmic Issues (Holger)

19.00 - 20.00 Killer Apps and Challenges (Barry)

## **Friday**

9.00 - 12.00

**Demo's**

**Summary Session**