

18th International Symposium on

#### FUNDAMENTALS OF COMPUTATION THEORY

OSLO, NORWAY August 22-26, 2011

The Symposium on Fundamentals of Computation Theory was established in 1977 for researchers interested in all aspects of theoretical computer science, as well as new emerging fields such as bio-inspired computing. It is a biennial series of conferences.

# http://fct11.ifi.uio.no/

### **PC Members**

- Erika Abraham (DE)
- Wolfgang Ahrendt (SE)
- David Coudert (FR)
- ► Camil Demetrescu (IT)
- Johan Dovland (NO)
- ▶ Jiri Fiala (CZ)
- Martin Hofmann (DE)
- ► Thore Husfeldt (DK)
- Alexander Kurz (UK)
- Andrzej Lingas (SE)
- Peter Olveczky (NO)
- ▶ Olaf Owe (NO) co-chair
- Miguel Palomino (ES)
- Yuri Rabinovich (IL)
- Saket Saurabh (IN)
- ► Kaisa Sere (FI)
- Martin Steffen (NO) co-chair
- ▶ Jan Arne Telle (NO) co-chair
- Tarmo Uustalu (EE)
- Ryan Williams (USA)
- Gerhard Woeginger (NL)
- ▶ David R. Wood (AU)
- Wang Yi (SE)

## **Important Dates**

**Submission Deadline:** 5. April 2011

**Author Notification:** 6. June 2011

Camera ready manuscript: 17. June 2011

**Symposium days:** 22 - 25 August 2011

Workshops: 26 August 2011

**Doctoral Symposium:** 26 August 2011

### **Invited Speakers**

- Yuri Gurevich (Microsoft Research, Redmond USA)
- Daniel Lokshtanov (University of California, USA)
- José Meseguer (University of Illinois at Urbana-Champaign, USA)

### **Topics**

#### Algorithms:

- algorithm design and optimization;
- combinatorics and analysis of algorithms;
- computational complexity;
- approximation, randomized, and heuristic methods;
- parallel and distributed computing;
- circuits and boolean functions;
- online algorithms;
- machine learning and artificial intelligence;
- computational algebra and geometry;

#### Formal methods:

- algebraic and categorical methods;
- automata and formal languages;
- computability and nonstandard computing models;
- database theory;
- foundations of concurrency and distributed systems;
- logics and model checking;
- models of reactive, hybrid and stochastic systems;
- principles of programming languages;
- program analysis and transformation;
- specification, refinement and verification;
- security;
- type systems;

#### **Emerging fields:**

- ad hoc, dynamic, and evolving systems;
- algorithmic game theory;
- computational biology;
- foundations of cloud computing/ubiquitous systems;
- quantum computing;























