# 28th Nordic Workshop on Programming Theory (NWPT'16)

Monday, October 31st

8:20-8:50: Registration of the workshop participants.

8:50-9:00: Workshop opening and welcome from the organizers.

09:00–10:30 (Room: Storstuen, chair: Jiri Srba)

- Invited talk: Finding Bugs in Linux Code with Type-And-Effect Abstraction by Andrzej Wasowski.
- On Formalizing Information-Flow Control Libraries by Marco Vassena and Alejandro Russo.

10:30-11:00: coffee break

11:00–12:30 (Room: Storstuen, chair: Alan Mycroft)

- Finite tree automata determinisation and its application in program analysis and verification by John P. Gallagher, Mai Ajspur and Bishoksan Kafle.
- Demand-Driven Interprocedural Analysis for Map-Based Abstract Domains by Kalmer Apinis, Varmo Vene and Vesal Vojdani.
- An operational semantics for Javascript DOM by Rasmus Thomas Tjalk-Boeggild and Christian W. Probst.

12:30-14:00: lunch

14:00–15:30 (Room: Storstuen, chair: Kim G. Larsen)

- Invited talk: Manifest Domains: Analysis and Description by Dines Bjørner.
- Reductions for transition systems at work: the bisimulation hierarchy of state-to-function transition systems by Marino Miculan and Marco Peressotti.

15:30-16:00: coffee break

16:00–17:30 (Room: Storstuen, chair: Jan Friso Groote)

- Non-interleaving operational semantics for late and early Pi-calculus by Hakon Normann.
- Types for CAS: Relaxed Linearity with Ownership Transfer by Elias Castegren and Tobias Wrigstad.
- A Calculus of Virtually Timed Ambients by Einar Broch Johnsen, Martin Steffen and Johanna Beate Stumpf.

19:00: Welcome dinner

### Tuesday, November 1st

09:00–10:30 (Room: Storstuen, chair: Jiri Srba)

- Invited talk: Using the Modal Mu-Calculus for Non Functional Properties by Jan Friso Groote.
- On (de-)composing causality by Georgiana Caltais, Stefan Leue and Mohammadreza Mousavi.

10:30-11:00: coffee break

#### 11:00-12:30 Parallel Session A (Room Storstuen, chair: Giorgio Bacci)

- Testing Software Product Lines using Differential Symbolic Execution by Sebastian Kunze and Mohammadreza Mousavi.
- Delta-Oriented FSM-Based Testing by Mahsa Varshosaz and Mohammadreza Mousavi.
- wNetKAT: Programming and Verifying Weighted Software-Defined Networks by Bingtian Xue, Stefan Schmid and Kim Larsen.

## 11:00–12:30 Parallel Session B (Room Salon, chair: John Gallagher)

- A Secrecy-Preserving Language for Programming of Object-Oriented and Distributed Systems by Toktam Ramezanifarkhani and Olaf Owe.
- From trash to treasure: timing-sensitive garbage collection by Mathias Vorreiter Pedersen and Aslan Askarov.
- What is your actual annotation overhead? by Duncan Cameron, Gudmund Grov and Leon McGregor.

12:30-14:00: lunch

### 14:00–15:30 Parallel Session A (Room Storstuen, chair: Mohammad Mousavi)

- Minimizing Markov Chains Beyond Bisimilarity by Giovanni Bacci, Giorgio Bacci, Kim Guldstrand Larsen and Radu Mardare.
- Approximating Probabilities in Static Analysis by Maja Kirkeby.
- Pomset Languages of Higher-Dimensional Automata by Uli Fahrenberg.

#### 14:00–15:30 Parallel Session B (Room Salon, chair: Olaf Owe)

- Enforcement and Specification of Evolving Privacy Policies for Social Networks by Raul Pardo.
- Towards Certified Compilation of Financial Contracts by Danil Annenkov and Martin Elsman.
- Don't let data Go astray by Eric Bodden, Michael Eichberg, Ka I Pun, Martin Steffen, Volker Stolz and Anna-Katharina Wickert.

15:30-16:00: coffee break

16:00–17:30 (Room Storstuen, chair: Einar Broch Johnsen)

- Multilevel Behavioural Metamodelling by Fernando Macias, Adrian Rutle and Volker Stolz.
- Integration of Runtime Verification into Metamodeling by Fernando Macias, Torben Scheffel, Malte Schmitz, Rui Wang, Martin Leucker, Adrian Rutle and Volker Stolz.
- Describing Behaviour Models through Reusable, Multilevel, Coupled Model Transformations by Adrian Rutle, Fernando Macias, Francisco Duran, Roberto Rodriguez-Echeverria and Uwe Wolter.

19:00: Workshop dinner

## Wednesday, November 2nd

09:00–10:30 (Room Storstuen, chair: Kim G. Larsen)

- Invited talk: Effects and Coeffects by Alan Mycroft.
- A Modular Reasoning System Using Uninterpreted Predicates for Code Reuse by Crystal Chang Din, Einar Broch Johnsen, Olaf Owe and Ingrid Chieh Yu.

10:30-11:00: coffee break

11:00–12:30 (Room Storstuen, chair: Uli Fahrenberg)

- An Operational Framework for Multilevel Cache Coherent Multicore Architectures by Shiji Bijo, Einar Broch Johnsen, Ka I Pun and Silvia Lizeth Tapia Tarifa.
- An Operational Semantics for Multicasting Systems with Monotonic Values by Seyed Hossein Haeri and Peter Van Roy.
- Thread Summaries for Lock-Free Data Structures by Sebastian Wolff.

12:30-14:00: lunch

14:00: End of the workshop and departure.