30th Nordic Workshop on Programming Theory (NWPT’18)

**Wednesday, October 24th**

9:00–9:30: Registration of the workshop participants.

9:30–9:35: Workshop opening and welcome from the organizers.

09:35–10:30 (Main room, chair: Olaf Owe) (invited talk)

- **Invited talk:** *Design and Validation of Cloud Storage Systems using Rewriting Logic* by Peter Ölveczky.

10:30–11:00: COFFEE BREAK

11:00–12:30 (Main room, chair: Jaakko Järvi) (semantics)

- *Connecting Choreography Languages With Verified Stacks* by Alejandro Gómez Londoño and Johannes Asman Pohjola.
- *Adding Constraints to CRDTs: From Eventual Consistency to Observable Atomic Consistency* by Xin Zhao and Philipp Haller.

12:30–13:30: LUNCH

13:30–15:00 (Main room, chair: Martin Steffen) (semantics theory)

- *Higher-Dimensional Timed Automata* by Uli Fahrenberg.
- *Contract-based Verification of Asynchronous Calls with Cooperative Scheduling* by Eduard Kamburjan, Crystal Chang Din, Reiner Hähnle and Einar Broch Johnsen.
- *A verified proof checker for higher-order logic* by Oskar Abrahamsson.

15:00–15:30: COFFEE BREAK

15:30–17:00 (Main room, chair: Peter Ölveczky) (software engineering)

- *Adaptations of API test case generation* by Cyrille Valentin Artho, Rudolf Ramler, Martina Seidl and Jun Yoneyama.
- *Graph Algebras and Software Engineering* by Uwe Wolter.
- *The Complexity of Identifying Characteristic Formulae* by Luca Aceto, Antonis Achilleos, Adrian Francalanza and Anna Ingolfsdottir.

19:00: Reception Ole-Johan Dahl’s building, 5th floor (https://www.mn.uio.no/ifi/english/about/)
Thursday, October 25th

09:00–10:30 (Main room, chair: Einar Broch Johnsen) (invited talk)
  - **Invited talk:** *Symbolic Computation Techniques in SMT Solving: Mathematical Beauty meets Efficient Heuristics* by Erika Ábrahám.
  - *Railway planning as bounded model checking* by Bjørnar Luteberget.

10:30–11:00: COFFEE BREAK

11:00–12:30 (Main room, chair: Magne Haveraaen) (modeling)
  - *On choreographies and communication failures* by Fabrizio Montesi and Marco Peressotti.

12:30–13:30: LUNCH

13:30–15:00 (Main Room, chair: Uwe Wolter) (formal methods)
  - *Towards Efficient Bit-Vector Interpolation* by Peter Backeman, Philipp Ruemmer and Aleksandar Zeljić.
  - *Static analysis for dynamic data race detection with TeSSLa* by Svetlana Jakšić, Malte Schmitz, Volker Stolz and Daniel Thoma.

15:00–15:30: COFFEE BREAK

15:30–17:00 (Parallel Session A Main room, chair: Marina Waldén) (analysis)
  - *A Roadmap for Multi-Model Consistency Management* by Patrick Stünkel, Harald König, Yngve Lamo and Adrian Rutle.
  - *Specifying with Syntactic Theory Functors* by Magne Haveraaen and Markus Roggenbach.

15:30–17:00 (Parallel Session B Room xxx, chair: Volker Stolz) (privacy and security)
  - *Language-Based Support for GDPR-Related Privacy Requirements* by Shukun Tokas and Toktam Ramezanifar Khani.
  - *Security Ceremonies with Heterogeneous Devices in ANP and PDL* by Antonio Gonzalez-Burgueño and Peter Ölveczky.

18:30: WORKSHOP DINNER at Ekeberg Restaurant (https://www.ekebergrestauranten.com/english/)
Friday October 26th

09:30–10:30 (Main room, chair: Olaf Owe) (invited talk)
- **Invited talk:** *Breaking and Fixing IoT Apps: from Attacks to Formal Methods for Security* by Andrei Sabelfeld.

10:30–11:00: COFFEE BREAK

11:00–12:30 (Main room, chair: Andrei Sabelfeld) (privacy and security)
- *A Runtime Enforcement Mechanism for Collaborative Privacy Policies in Online Social Networks* by Hanaa Alshareef, Raul Pardo and Gerardo Schneider.
- *A Language for Modelling Privacy* by Ian Oliver.
- *A Survey of Semantic Attribute-Based Access Control Schemes* by Hamed Arshad.

12:30–13:30: LUNCH and PC meeting

13:30: End of the workshop and departure.