	Monday (24.02.25)	Tuesday	Wednesday	Thursday	Friday (28.02.25)
09:00 - 09:45	**Chadlia Jerad**: Intro to the seminar, goals and structure. Quick attendee intro	**Lothar Thiele**: Framing the Discussion: Timeliness vs. Accuracy	**Claire Pagetti**: Framing the Discussion: Predictability vs. Adaptability	**Hokeun Kim**: Framing the Discussion: Security vs. Accessibility	**Chadlia Jerad**: Organizing hands-on sessions **5 Parallel hands-on sessions:**
9:45 - 10:30	**Edward Lee**: Framing the Discussion: Consistency vs. availability	**Position Stmnts / Short talks** **Martin Schoeberl:** Benchmarking Worst-Case Performance of Real-Time Systems **Chadlia Jerad**: Time-predicability levels **Katharina Sedow**: fail-operational systems in the automotive domain **Jérôme Hugues**: necessary conditions for model engineering to ensure system correctness	**Position Stmts & short talks:** **Eric Tutu Tchao:** Case Study: Perspectives of Fundamental Trade-offs in Reactive Systems for Illegal Mining Activities Detection and Smart Agriculture in Resource-Constrained Environments **Samarjit Chakraborty:** Towards Formalizing Tradeoffs in Reactive Systems Design	**Short Talks** (15 min): **Marc Geilen:** A component model and modelling language for trade-offs and multi-objective optimization **Eugene Yip:** Utility-Based System Design: Making sense of trade-offs	**1) Lingua Franca**: Erling Jellum **2) Timed SCCharts:** Alexander Schulz-Rosengarten & Reinhard von Hanxleden **3) QRML (Software for multi-objective optimization)**: Marc Geilen **4) HipHop**: Manuel Serrano **5) Rebeca**: Marjan Sirjani
10:30 - 11:00	Coffee				
11:00 - 12:15	**Short Talks (15 min):** **Andres Goens**: Latency/Consistency Tradeoffs in Cache-Coherent Shared-Memory Systems **Marjan Sirjani:** Consistency versus Availability in Redundant Controllers **Shaokai Lin**: CAL Theorem in Reactive Systems	**Talks:** **Alexander Schulz-Rosengarten & Reinhard von Hanxleden**: Timing Tradeoffs in Timed Automata with Dynamic Ticks **Jonathan Sprinkle** (30 min): Can control barrier functions keep automated vehicles safe in live freeway traffic? or Controlling 100 Connected Automated Vehicles at Scale for Traffic Wave Dampening on Freeways	**Short Talks (15 min):** **Arthur Clavière**: Assurance of Neural Network-based Safety-Critical Avionics with Formal Methods **Manuel Serrano:** The Functional, The Imperative, and the Suodoku **Alain Girault**: memory footprint of parallel schedules of dataflow graphs, tradeoffs between memory and execution time	**Short Talks (15 min):** **Grzegorz Bazydlo**: Modeling Reconfigurable CPS Using UML **Anupam Chattopadhyay:** Security-Efficiency Trade-offs for Intelligent Systems **Andres Barrilado: f**unctional safety in semi-conductors **Marcus Rossel:** Formally-verified system design as foundation for Trustworthy Reactive Systems	**Hands-on sessions** **4 Parallel hands-on sessions:** 1) **Lingua Franca**: Erling Jellum **2) Timed SCCharts:** Alexander Schulz-Rosengarten & Reinhard von Hanxleden **3) QRML (Software for multi-objective optimization):** Marc Geilen **4) HipHop:** Manuel Serrano
12:15 - 14:00	Lunch (with assigned seats)	Lunch (with assigned seats)	Lunch (with assigned seats)	Lunch (with assigned seats)	Lunch
14:00 - 14:45	**Claire Pagetti:** Organizing group work Group work **1) Distributed music challenge:** Animator: Edward A. Lee / Scribe: Andres Goens **2) Can AI be used in critical Systems?** Animator: Claire Pagetti / Scribe: Jérôme Hugues	**Jeronimo Castrillon** (15 min): Reactive systems: Optimizations (including accuracy trade-offs) and opportunities in domain-specific computing **Jeronimo Castrillon:** Organizing group work Group work: **1) Benchmarks for RT systems**. Animator: Martin Schoeberl **2) Tradeoff of timeliness and accuracy**. Animator: Jeronimo Castrillon **3) Orchestration/coordination languages vs reactive languages** (similar, complementary?). Animator: Manuel Serrano		**Jan Reineke:** Synergies between [Research on] Timing Predictability and Microarchitectural Security **Report back from group work of Tuesday** **Software teasers:** **Marjan Sirjani:** Rebeca **Erling Jellum:** Lingua Franca	
14:00 - 15:30			Social event		Departures

	Monday (24.02.25)	Tuesday	Wednesday	Thursday	Friday (28.02.25)
15:30 - 16:00	Coffee			Coffee	
16:00-17:30	**Position Stmts / Short talks:** **Erling Jellum**: A Motivating Application: Distributed Music **Arpan Gujarati**: Can we make COTS CPS ultra-reliable? **Einar Broch Johnsen**: Declarative Lifecycle Management in Digital Twins	**Short Talks** **Victor Jegu:** Airbus topics of interest **Selma Saidi:** Design Tradeoffs in Collaborative Autonomous Systems **Grzegorz Bazydlo:** Modeling Reconfigurable CPS Using UML (if time otherwise Thursday Morning) **Johannes Oster:** DeepSeek discussion on the Digital Humanism Zoom		**Alexander Schulz-Rosengarten & Reinhard von Hanxleden:** Timed SCCharts **Marc Geilen:** QRML (Software for multi-objective optimization) **Manuel Serrano:** HipHop **Plenary: Wrap-up, presentations, ...**	
17:30-18:00	**Plenary/reporting**	**Johannes Oster**: DeepSeek			
18:00 - 20:00	Dinner				
20:00 - ...	Social, ping pong, billiards, wine cellar, ...				