Tentative Seminar Schedule

Note:
Please plan for an initial presentation of 20 minutes, followed by a 10 minutes immediate discussion per contribution / allocated slot. In response to the discussion and response by the audience, we have the flexibility to extend certain slot or schedule a corresponding work group session.

There will be half an hour coffee break every morning and afternoon.

Monday, January 28		
Time	Talk	
09:00 – 09:30	Welcome, logistical infos on Dagstuhl and the seminar, Motivation for the seminar	A. Herkersdorf M. Paulitsch M. Hinchey
09:30 – 10:30	Brief one-minute introduction by every participant; Collecting individual objectives for this week	Moderator: A. Herkersdorf
10:30 – 11:00	Coffee Break	
Session: Overview on Related EU and BMBF Projects		
	parMERASA - Multi-Core Execution of Parallelised Hard Real-time Applications	T. Ungerer
	The ACROSS MPSoC (A Deterministic and Certifiable Multi-Core Architecture for Safety-Critical Embedded Applications)	C. El Salloum
12:15 – 14:00	Lunch Break	
	Overview on the EU RECOMP and BMBF ARAMiS projects	M. Paulitsch et al.
Session: Industry Perspectives		
	Porting a grown system from single- to multi-core hardware	R. Graf
	Commercial Challenges of MultiCore products in Automotive	G. Farrell
	Sharing resources of multi-core system-on-chips in mixed-criticality applications: Issues and solutions towards achieving temporal partitioning	M. Paulitsch
	“Heterogeneous Multiprocessing or Just a Bunch of Coprocessors?” – The case for unified programmability	E. Lübbers
17:30 – 18:00	Reflections on the day	Moderator: A. Herkersdorf
18:00	Dinner	

Tuesday, January 29		
Time	Talk	
Session: Coping with Non-Functional Requirements		
	Real-Time: Many cores - many problems	R. Wilhelm
	Hard Real-Time: Many cores - many problems Timing Predictability of Multi-Core Processors	C. Ferdinand, R. Wilhelm
	Safe(r) Loop Computations on Multi-Cores	J. Teich
	Chances and risks for security in Multicore processors	G. Sigl
	Necessity for & Feasibility of a Multicore Ecosystem	A. Herkersdorf
12:00 – 12:15	Introduction to work group proposals	R. Graf S. Petters G. Sigl L. Thiele
12:15 – 14:00	Lunch Break	
Session: Software Development for Multicore		
	Analysis of Embedded Software for Multicore in the Automotive Domain	S. Görzig
	Distilling Programs for Multicore Architectures	G. Hamilton
	Sustainable development of software in the Multi-Core age	M. Pruksch
	First work group meetings	
	Plenum presentation and discussion on work group findings	
17:30 – 18:00	Reflections on the day	Moderator: M. Paulitsch
18:00	Dinner	

Wednesday, January 30		
Time	Talk	
Session: Multicore Architecture Aspects		
	Workgroup Meeting Summaries	L. Thiele G. Sigl
	IDAMC - A manycore architecture for mixed critical applications	R. Ernst
	NoC contention in many-cores and its impact on mapping	S. Petters
	Isolation of cores to support development of mixed critical systems based on multicore controllers	C. Stellwag
	Fault-Tolerant Time-Triggered Communication Infrastructure for Multi-Processor Systems-on-a-Chip	R. Obermaisser
	Reflections on t(w)oday	Moderator: M. Paulitsch
12:30 – 13:30	Lunch Break	
	Hiking tour or sightseeing to Trier	
18:00	Dinner	

Thursday, January 31		
Time	Talk	
Session: Tools for Multicore		
	Efficient observation of Multi-Core SoCs	A. Weiss
	A Model-based Approach for Optimizing Existing Real-Time Software on Multicore Processors	M. Deubzer
	High-level Simulation-based Design Space Exploration on Multicore Virtual Platforms	T. Wild
	Overview on multicore technology development in the European space industry for future missions	M. Ferraguto
	Fine-Grained Methodology for HW/SW Process Migration in MPSoCs	S. Parameswaran
12:15 – 14:00	Lunch Break	
	OpTiMSoC – An Open Source Experimentation Platform for Multicore	S. Wallentowitz
	Continuation of work group meetings	
17:30 – 18:00	Reflections on the day	Moderator: tbd
18:00	Dinner	

Friday, February 1st		
Time	Talk	
12:30 – 14:00	Lunch Break	