

MCC13 Program

S.No.	Item	Time	Session Chair
MCC13 Day 1- November 25			
	Registration	9:30 – 9:50	
	Opening Remarks	9:50 – 10:00	
Keynote talk 1			Tomas Nordström
Key1	“Invasive Computing - The Quest for Many-Core Efficiency and Predictability”, Prof. Jürgen Teich	10:00 – 11:00	
Session-1 Mapping support for Manycores			Johan Lilius
1.1	“Mapping Streaming Applications on Multiprocessors with Statically Configured NoC”, Usman Mazhar Mirza, Flavius Gruian and Krzysztof Kuchcinski	11:00 – 11:30	
1.2	“Energy-Efficient Mapping of Streaming Tasks for Crown Scheduling on Many-Core Systems”, Nicolas Melot, Christoph Kessler and Jörg Keller	11:30 – 12:00	
Lunch		12:00 – 13:00	
Keynote talk 2			Håkan Grahn
Key2	“Cyber-Physical Systems (CPS) - Heterogenous Multi-Core Architectures for HPC and safe Technologies”, Prof. Jürgen Becker	13:00 – 14:00	
Session-2 GPUs			Håkan Grahn
2.1	“Conditional component composition for GPU-based systems”, Usman Dastgeer and Christoph Kessler	14:00 – 14:30	
2.2	“Parallel tree-ensemble algorithms for contemporary and future graphics processing units using CUDA”, Karl Jansson, Håkan Sundell and Henrik Boström	14:30 – 15:00	
Coffee Break		15:00 – 15:30	
Session-3 Applications on Manycores			Zain Ul-Abdin
3.1	“A task parallel implementation of a scattered node stencil-based solver for the shallow water equations”, Martin Tillenius, Elisabeth Larsson, Erik Lehto and Natasha Flyer	15:30 – 16:00	
3.2	“Preliminary Results of Combining Thread-Level Speculation and Just-in-Time Compilation in Google’s V8”, Jan Kasper Martinsen, Håkan Grahn and Anders Isberg	16:00 – 16:30	

MCC13 Day 1- November 25			
Session-4 Poster Pitches & Poster Session		16:30 – 18:00	Tomas Nordström
4.1	“A Quantitative Comparison of Emulated Shared Memory Architectures to Current Multicore CPUs and GPUs”, Erik Hansson, Erik Alnervik, Christoph Kessler and Martti Forsell	16:30 – 16:35	
4.2	“BOS: A task-graph processing software framework for the Epiphany many-core architecture”, David Engdal, Peter Brauer, Aare Mällo and Martin Lundqvist	16:35 – 16:40	
4.3	“Reducing the complexity of debugging parallel REPLICA programs with pluggable abstraction patterns”, Jari-Matti Mäkelä, Ville Leppänen and Martti Forsell	16:40 – 16:45	
4.N	Project Posters		
Social Event (Dinner)		19:00 – 21:00	

MCC13 Day 2- November 26			
Keynote talk 3			Zain Ul-Abdin
Key3	“Architecture and Programming Models of the Kalray MPPA Single Chip Manycore Processor”, Dr. Benoît De Dinechin, CEO Kalray	9:00 – 10:00	
Coffee Break		10:00 – 10:30	
Session-5 Libraries and Runtime support			Christoph Kessler
5.1	“Power Optimized Many-Cores with User Centric Notion of Parallelism” - Simon Holmbacka, Sébastien Lafond and Johan Lilius	10:30 – 11:00	
5.2	“Shared Resource Sensitivity in Task-Based Runtime systems” - Germán Ceballos and David Black-Schaffer	11:00 – 11:30	
5.3	“A Communication Library for Mapping Dataflow Applications on Manycore Architectures” - Mingkun Yang, Süleyman Savas, Zain Ul-Abdin and Tomas Nordström	11:30 – 12:00	
Lunch		12:00 – 13:30	
Session-6 Memory Management in Multi-core			Krzysztof Kuchcinski
6.1	“Exploring the Placement of Memory Controllers in Manycore Processors: A Case Study for Intel SCC”, Patrick Eitschberger, Jörg Keller, Frank Thiele and Christoph Kessler	13:30 – 14:00	
6.2	“Automatic Multi-Core Cache Characteristics Modelling”, Marcus Jägemar, Sigrid Eldh, Andreas Ermedahl and Björn Lisper	14:00 – 14:30	
Coffee Break		14:30 – 14:45	
Session-7 Resource Management in Multi-core			Bertil Svensson
7.1	“Combining Performance Monitoring and Resource Budgeting on Multi-core for Real-Time Guarantees”, Jonas Flodin, Kai Lampka and Wang Yi	14:45 – 15:15	
7.2	“Considering Quality-of-Service for Resource Reduction using OpenMP”, Artur Podobas, Mats Brorsson, Vladimir Vlassov, Chi Ching Chi and Ben Juurlink	15:15 – 15:45	
Concluding Remarks		15:45 – 16:00	