8:30-10:00 Session I: Parallel Programming Models and Languages	Session Chair: Prof. Xiaofei Liao *Huazhong University of Science and Technology*

Kokkos Array Performance-Portable Manycore Progamming Model

H. Carter Edwards and Daniel Sunderland

An Hybrid Model for Very High Level Threads

Jafar Al-Gharaibeh, Clinton Jeffery and Kostas Oikonomou

Function Flow: Making Synchronization Easier in Task Parallelism

Xuepeng Fan, Hai Jin, Liang Zhu, Xiaofei Liao and Chengcheng Ye

New Strategy for Coarse Grid Solvers in Parallel Multigrid Methods using OpenMP/MPI Hybrid Programming Models

Kengo Nakajima

Networks Beat Pipelines: The Design of FG 2.0

Peter Johnson and Thomas Cormen

10:00-10:30 Break

10:30-12:00 Session II: Cache, Memory and IO	Session Chair: Prof. Dongrui Fan *Institute of Computing Technology, Chinese Academy of Sciences, China*

AGC: Adaptive Global Clock in STMs

Ehsan Atoofian and Amir Ghanbari Bavarsad

Efficient Execution of Time-step Computations with Pipelined Parallelism and Inter-thread Data Locality Optimzaitions

Apan Qasem

Revisiting Shared Virtual Memory Systems for Non-Coherent Memory-Coupled Cores

Stefan Lankes, Pablo Reble, Carsten Clauss and Oliver Sinnen

Efficient Memory Management of a Hierarchical and a Hybrid Main Memory for MN-MATE Platform

Kyu Ho Park, Sung Kyu Park, Hyunchul Seok, Woomin Hwang, Dong-Jae Shin, Jong Hun Choi and Ki-Woong Park

Massively Parallel Breadth First Search using a Tree-Structured Memory Model

Tom St. John, Jack Dennis and Guang Gao

12:00-1:30 Lunch

13:30-15:00 Session III: Parallel Algorithm Optimization	Session Chair: Prof. Uzi Vishkin *University of Maryland*

PMA: Pixel-based Multi-Anchor Algorithm for Image Recognition on Multi-core Systems

Xiaoxin Tang,Long Zheng, Jun Ma, Yao Shen, Li Li and Minyi Guo.

Better Speedups Using Simpler Parallel Programming for Graph Connectivity and Biconnectivity

James Edwards and Uzi Vishkin

Shared Work List: Hacking Amorphous Data Parallelism in UPC

Shixiong Xu and Li Chen.

A Case for Secure and Scalable Hypervisor using Safe Language

Haibo Chen and Binyu Zang

Semi-sparse Algorithm Based on Multi-layer Optimization for Recommendation System

Hu Guan, Huakang Li and Minyi Guo	
15:00-15:30 Break	
15:30-17:00 **Session IV: GPU Acceleration**	**Session Chair: Prof. Ehsan Atoofian** *Lakehead University, Canada*

GHOST: GPGPU-Offloaded High Performance Storage I/O Deduplication for Primary Storage System *Chulmin Kim, Ki-Woong Park and Kyu Ho Park*
Exploring Parallelism in Volume Ray Casting: Understanding the Programming Issues of Multithreaded Accelerators *Guilherme Cox, Cleomar Silva, Leandro Cupertino, Cristiana Bentes and Ricardo Farias*
Techniques for the Parallelization of Unstructured Grid Applications on Multi-GPU Systems *Lizandro Solano-Quinde, Brett Bode and Arun Somani*
Chestnut: A GPU Programming Language for Non-Experts *Andrew Stromme, Ryan Carlson and Tia Newhall*