2016 Third Workshop on Accelerator Programming Using Directives

WACCPD 2016

Table of Contents

Message from the Workshop Chairs

Workshop Papers

Acceleration of Element-by-Element Kernel in Unstructured Implicit Low-Order Finite-Element Earthquake Simulation Using OpenACC on Pascal GPUs

Kohei Fujita, Takuma Yamaguchi, Tsuyoshi Ichimura, Muneo Hori, and Lalith Maddegedara

Towards Achieving Performance Portability Using Directives for Accelerators

M. Graham Lopez, Verónica Vergara Larrea, Wayne Joubert, Oscar Hernandez, Azzam Haidar, Stanimire Tomov, and Jack Dongarra

A Modern Memory Management System for OpenMP

J. D. Sewall, S. J. Pennycook, A. Duran, X. Tian, and R. Narayanaswamy

An Extension of OpenACC Directives for Out-of-Core Stencil Computation with Temporal Blocking

Nobuhiro Miki, Fumihiko Ino, and Kenichi Hagihara

OpenACC Cache Directive: Opportunities and Optimizations

Ahmad Lashgar and Amirali Baniasadi

Identifying and Scheduling Loop Chains Using Directives

Ian J. Bertolacci, Michelle Mills Strout, Stephen Guzik, Jordan Riley, and Catherine Olschanowsky

Exploring Compiler Optimization Opportunities for the OpenMP 4.x Accelerator Model on a POWER8+GPU Platform

Akihiro Hayashi, Jun Shirako, Ettore Tiotto, Robert Ho, and Vivek Sarkar

A Portable, High-Level Graph Analytics Framework Targeting Distributed, Heterogeneous Systems

Robert Searles, Stephen Herbein, and Sunita Chandrasekaran

Author Index