

31st IEEE INTERNATIONAL Parallel and Distributed Processing SYMPOSIUM



May 29-June 2, 2017
Buena Vista Palace Hotel
Orlando, Florida USA

www.ipdps.org

Orlando is home to a rich offering of indoor and outdoor attractions. Located a mile from Walt Disney World® and 4 miles from Epcot, the Buena Vista Palace Hotel is a 5-minute walk from Downtown Disney with a complimentary shuttle to all Disney Theme Parks and Water Parks. The sprawling Lake Buena Vista resort offers a full menu of amenities and family friendly activities as well as ideal meeting space for IPDPS 2017.

IPDPS 2017 CALL FOR PAPERS

Authors are invited to submit manuscripts that present original unpublished research in all areas of parallel and distributed processing, including the development of experimental or commercial systems. Work focusing on emerging technologies and interdisciplinary work covering multiple IPDPS areas are especially welcome. During submission, authors can indicate up to three subject areas that can come from any track. Topics of interest include, but are not limited to:

- **Parallel and distributed algorithms**, focusing on topics such as: numerical and combinatorial parallel algorithms for analysis, machine learning and simulation; parallel algorithms for accelerators, neuromorphic architectures, and other non-traditional systems; algorithms for cloud computing; power-aware parallel algorithms; streaming algorithms; domain-specific parallel and distributed algorithms; performance modeling and analysis of parallel and distributed algorithms; run-time algorithms and protocols for resource management, communication and synchronization on parallel and distributed systems..
- **Applications of parallel and distributed computing**, including computational and data-enabled science and engineering, big data applications, parallel crowd sourcing, large-scale social network analysis, management of big data, cloud and grid computing, scientific, biological and medical applications, and mobile computing. Papers focusing on applications using novel commercial or research architectures, big data approaches, or discussing scalability toward the exascale level are encouraged.
- **Parallel and distributed architectures**, including architectures for instruction-level and thread-level parallelism; petascale and exascale systems designs; novel big data architectures; special purpose architectures, including graphics processors, signal processors, network processors, media accelerators, and other special purpose processors and accelerators; impact of technology on architecture; network and interconnect architectures; parallel I/O and storage systems; architecture of the memory hierarchy; power-efficient and green computing architectures; dependable architectures; and performance modeling and evaluation.
- **Parallel and distributed software**, including parallel and multicore programming languages and compilers, runtime systems, operating systems, resource management including, middleware for supercomputers, grids, clouds, and data centers, libraries, performance modeling and evaluation, parallel programming paradigms, and programming environments and tools. Papers focusing on novel software systems for big data and exascale systems are encouraged.

GENERAL CHAIR

Michela Taufer
(University of Delaware, USA)

PROGRAM CHAIR

Marc Snir
(University of Illinois at Urbana Champaign, USA)

PROGRAM VICE-CHAIRS

- **Algorithms:**
Pierre Fraigniaud (IRIF, France)
- **Applications:**
Robert D. Moser (UT Austin, USA)
- **Architecture:**
Hillery Hunter (IBM Research, USA)
& Robert Senger (IBM Research, USA)
- **Software:**
Pavan Balaji (Argonne National Lab, USA)
- **Multidisciplinary:**
Torsten Hoefler (ETH Zurich, Switzerland)

■ KEYNOTES & TECHNICAL SESSIONS

■ WORKSHOPS & PHD FORUM

■ COMMERCIAL PARTICIPATION

Details at www.ipdps.org

IMPORTANT DATES

October 18, 2016	Submit Abstract
October 23, 2016	Submit Paper
Nov 28 - Dec 5, 2016	Review Feedback & Author Response
January 8, 2017	Author Notification
After January 8, 2017	Deadlines for Paper Submissions to Most Workshops

SPONSORED BY:



Technical Committee on Parallel Processing

IN COOPERATION WITH:



ACM SIGARCH & SIGHPC

IEEE Computer Society Technical Committee on Computer Architecture

IEEE Computer Society Technical Committee on Distributed Processing