

International Spring School on High Performance Computing



San Sebastián / Donostia, Spain, April 23-27, 2018

more info: <http://grammars.grlmc.com/HighPer2018/>

Keynote Speakers

- Federico Calzolari (Scuola Normale Superiore), *Supercomputing: From CERN to Our Lives*
- Tony Hey (Rutherford Appleton Laboratory, UK Science and Technology Facilities Council), *Big Scientific Data and Data Science*

Professors and Courses (to be completed)

- Srinivas Aluru (Georgia Institute of Technology), [intermediate] *High Performance Computational Biology*
- David A. Bader (Georgia Institute of Technology), [introductory/intermediate] *Massive-scale Graph Analytics*
- Ümit V. Çatalyürek (Georgia Institute of Technology), [introductory/intermediate] *HPC Graph Analytics*
- Alan Edelman (Massachusetts Institute of Technology), [introductory] *High Performance Computing on Parallel Computers and GPUs with Julia*
- Richard Fujimoto (Georgia Institute of Technology), [intermediate] *Parallel Discrete Event Simulation*
- Timothy C. Germann (Los Alamos National Laboratory), [intermediate] *HPC Frontiers in Computational Materials Science and Engineering*
- Lennart Johnsson (University of Houston), [introductory/intermediate] *Energy Efficient Computing*
- Alfio Lazzaro (University of Zurich), [introductory/intermediate] *Code Performance Optimizations*
- Andrew Lumsdaine (Pacific Northwest National Laboratory), [intermediate/advanced] *Modern C++ for High-performance Computing*
- Madhav Marathe (Virginia Polytechnic Institute and State University), [introductory/advanced] *Studying Massively Interacting Bio-social Systems: Pervasive, Personalized and Precision Analytics*
- Frank Mueller (North Carolina State University), [advanced] *Embracing the Exascale Challenge: From Accelerators over Scalable Program Tracing to Resilience*
- J. (Ram) Ramanujam (Louisiana State University), tba
- Adrian Sandu (Virginia Polytechnic Institute and State University), [introductory/intermediate] *Revealing Parallelism: How to Decompose your Problem into Concurrent Tasks*
- Vivek Sarkar (Georgia Institute of Technology), [introductory] *Fundamentals of Parallel, Concurrent, and Distributed Programming*
- Marc Snir (University of Illinois at Urbana-Champaign), [introductory] *Programming Models and Run-times for High-Performance Computing*
- El-Ghazali Talbi (University of Lille 1), [introductory] *Parallel Metaheuristics for Optimization and Machine Learning*
- Josep Torrellas (University of Illinois at Urbana-Champaign), [intermediate/advanced] *Parallel Computer Architecture Concepts*
- Todd J. Treangen (University of Maryland, College Park), [intermediate] *Metagenomic Assembly and Validation*
- Elena Vataga (University of Southampton), [introductory] *Hands-on Introduction to HPC for Life Scientists*
- Jeffrey S. Vetter (Oak Ridge National Laboratory), [intermediate] *Exploiting Deep Memory Hierarchies*
- Uzi Vishkin (University of Maryland, College Park), [introductory/intermediate] *Parallel Algorithmic Thinking and How It Has Been Affecting Architecture*
- David Walker (Cardiff University), [intermediate] *Parallel Programming with OpenMP, MPI, and CUDA*

Acknowledgments



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