

IXPUG Workshop and Tutorials & Intel® PCC Meeting

Tuesday, 15 March 2016

IXPUG Workshop: Registration - IXPUG workshop is open for all users. - Foyer (13:00 - 13:30)

IXPUG Workshop: Opening: Vít Vondrák (IT4I): Welcome in Ostrava (13:30 - 13:45)

IXPUG Workshop: Opening: Thomas Steinke (ZIB, Berlin): The Intel Xeon Phi User's Group - Sapphire (13:45 - 14:00)

IXPUG Workshop: Keynote by Joseph Curley (Intel): Road to Many Core & the View Ahead (14:00 - 15:00)

IXPUG Workshop: Thomas Steinke (ZIB, Berlin), Georg Zitzlsberger (Intel), CJ Newburn (Intel), Michael Lysaght (ICHEC, Dublin): IXPUG Working Groups - Sapphire (15:00 - 15:30)

IXPUG Workshop: Vectorization I: James Willis, Richard Bower and Matthieu Schaller (ICC Durham): Optimisation of the core kernels of the particle-based code SWIFT on AVX and AVX2 leading to ~3x speed-up - Sapphire (16:00 - 16:30)

IXPUG Workshop: Vectorization I: Luigi Iapichino and Fabio Baruffa (LRZ Munich): Improving the vectorisation of a Gadget kernel: efficiency and potential on multiple platforms - Sapphire (16:30 - 17:00)

IXPUG Workshop: Vectorization I: Sergi Siso, Luke Mason and Michael Seaton (Hartree Centre, Daresbury): Code modernization of DL MESO LBE to achieve good performance on the Intel Xeon Phi (17:00 - 17:30)

IXPUG Workshop: Vectorization I: Discussion - Sapphire (17:30 - 18:00)

Wednesday, 16 March 2016

IXPUG Workshop: Keynote by CJ Newburn (Intel): Bigger, faster, persistent storage and how you get to it (HBM, 3DXP, OmniPath) - Sapphire (09:00 - 10:00)

IXPUG Workshop: New Application Areas: Servesh Muralidharan, Oisín Robinson, Gilles Civario and Michael Lysaght (ICHEC, Dublin): A comparison study of vectorization approaches to optimize multiplication of large integers on Intel Xeon/Xeon Phi platforms (10:30 - 10:55)

IXPUG Workshop: New Application Areas: Marcel Ehrhardt and Hannes Hauswedell (FU Berlin): The SeqAn C++ library for efficient NGS sequence analysis - HPC modernisation using generic programming - Sapphire (10:55 - 11:20)

IXPUG Workshop: New Application Areas: Milan Jaros (IT4I, Ostrava): The Fundamentals: How to accelerate Blender with the Intel Xeon Phi coprocessors - Sapphire (11:20 - 11:45)

IXPUG Workshop: New Application Areas: Discussion - Sapphire (11:45 - 12:00)

IXPUG Workshop: Tools session by Florent Lebeau (Allinea): Experiences preparing HPC codes for Intel Knights Landing with Allinea's tools - Sapphire (13:00 - 14:00)

IXPUG Workshop: Vectorization II: Lubomir Riha, Michal Merta and Jan Zapletal (IT4I, Ostrava): Acceleration of FETI Solvers and the BEM4I library using the Intel Xeon Phi coprocessors - Sapphire (14:00 - 14:25)

IXPUG Workshop: Vectorization II: Vladimir Mironov and Alexander Moskovsky (Lomonosov Moscow Univ.): Parallelization and optimization of Hartree-Fock method in GAMESS-US quantum chemistry code - Sapphire (14:25 - 14:50)

IXPUG Workshop: Vectorization II: Nikola Tchipev, Steffen Seckler, Philipp Neumann and Hans-Joachim Bungartz (TU Munich): Optimizing ls1-mardyn for Xeon Phi - Sapphire (14:50 - 15:15)

IXPUG Workshop: Vectorization II: Discussion - Sapphire (15:15 - 15:30)

IXPUG Workshop: Middleware: Adrian Jackson, Michele Weiland and Nick Johnson (EPCC, Edinburgh): Power monitoring using Adept tools and RAPL - Sapphire (16:00 - 16:25)

IXPUG Workshop: Middleware: Wojciech Waśko, Piotr Uminski and Krzysztof Kulakowski (Intel): Memkind: the API to leverage heterogeneous memory architectures - Sapphire (16:25 - 16:50)

IXPUG Workshop: Middleware: Discussion - Sapphire (16:50 - 17:00)

IXPUG Workshop: CJ Newburn (Intel): hStreams: Easing the way to heterogeneous platforms like Knights Landing - Sapphire (17:00 - 18:00)