

PRACE Summer of HPC 2021

Tuesday, June 29, 2021 - Monday, August 30, 2021

ONLINE EVENT

Projects

Project #, Site, Project name, participants

2101 BSC

Analysis of data management policies in HPC architectures - Regina Mumbi Gachomba, Aneta Ivaničová

2102 BSC

Computational atomic-scale modelling of materials for fusion reactors - Eoin Kearney, Paolo Settembri

2103 BSC

Precision based differential checkpointing for HPC applications - Kevser İLDEŞ, Athanasios Kastoras

2104 BSC

Building Resilient Machine Learning Applications (From HPC to Edge) - Mehmet Enes Erciyes, Jakub Raczyński

2105 BSC

Cross-Lingual Transfer learning for biomedical texts - Aslihan Uysal, Lazaros Zervos

2106 BSC

Improvement of a python package to provide multiple standardized interpolation methods for atmospheric chemistry models - Daniel Cortild, Brian O'Sullivan

2107 CC SAS

Neural networks in quantum chemistry - Scott le Roux, Joseph Sleiman

2108 CC SAS

Efficient Fock matrix construction in localized Hartree-Fock method - Ioannis Savvidis, Eduárd Zsurka

2109 CERN

Benchmarking HEP workloads on HPC facilities – Miguel de Oliveira Guerreiro, María Menéndez Herrero

2110 CERN

High Throughput HEP Data Processing at HPC - Carlos Eduardo Cocha Toapaxi, Andraž Filipčič

2111 CINECA

Automated Classification for Mapping submarine structures by Artificial Intelligence strategies - Mario Udo Gaimann, Raska Soemantoro

2112 CINECA

Combining Big-data, AI and 3D visualization for datacentre optimization - David Mulero Pérez,

Sepideh Shamsizadeh

2113 EPCC

Investigating Scalability and Performance of MPAS Atmosphere Model -Jonas Alexander Eschenfelder, Carla Nicolin Schoder

2114 EPCC

Re-engineering and optimizing Software for the discovery of gene sets related to disease - İrem Okur, Aybüke Özçelik

2115 EPCC

Performance of Parallel Python Programs on ARCHER2 – Alejandro Dinkelberg, Jiahua Zhao

2116 ICHEC

Parallel anytime branch and bound algorithm for finding the treewidth of graphs – Oliver Legg, Valentin Trophime

2117 ICHEC

Parallelizing Earth Observation Workflow – Niels Hvidberg, Rabia Özdoğan

2118 IT4I

Molecular Dynamics on Quantum Computers – Carola Ciarametti, Jenay Patel

2119 IT4I

Quantum algorithms and their applications – Lucia Absalom Bautista, Spyridon-Andreas Siskos

2120 JSC

High Performance Quantum Fields – Thomas Marin, Marc Túnica Rosich

2121 JSC

Tiny, tiny, tasks! Huge Impact? – Arthur Guillec, Tristan Michel

2122 LPP

Numerical simulation of Boltzmann-Nordheim equation – David Knapp, Artem Mavilutov

2123 MdIS

Parallel radiative heat exchange solver for analyzing samples from the OSIRIS-REx space exploration mission – Cormac McKinstry, Venkata Mukund Kashyap Yedunuthala

2124 Hartree

Hybrid AI Enhanced Monte Carlo Methods for Matrix Computation on Advanced Architectures - Iakov Kharitonov, Adrian Lundell

2125 Hartree

Scaling HMC on large multi-CPU and/or multi-GPGPUs architectures - Tiziano Barbari, Morten Holm

2126 SURF

Benchmarking Scientific Software for Computational Chemistry in the Dutch National Supercomputer - Sahin Can Alpaslan, Milana Mirkovic

2127 SURF

Maximising data processing efficiency in the cloud, with a twist for Research Data Management – Maria Li López Bautista, João Quintiliano Sérgio Guerreiro

2128 UL

S-gear geometry generation and optimisation algorithm based on transient finite element mechanical/contact analyses – Ceren Tamkoç, Bartu Yaman

2129 UL

Big data management for better electricity consumption prediction – Irem Dundar, Omar Patricio Perez Znakar

2130 ULux

Designing Scientific Applications on GPUs - Theodoros Aslanidis, Martin Stodůlka

2131 ULux

Aerodynamics – Benet Eiximeno Franch, Paolo Scuderi

2132 VSC

HPC Implementation of Molecular Surfaces - Miriam Beddig, Ulaş Mezin

2133 VSC

The convergence of HPC and Big Data/HPDA - Pedro Hernandez Gelado, Rajani Kumar Pradhan