

AUSTRIAN HPC MEETING 2018 - AHPC18   February 19-21, 2018   Linz, Austria			Workshops		
Monday, February 19, 2018	Tuesday, February 20, 2018	Wednesday, February 21, 2018	Thursday, February 22, 2018		
 <p><b>Opening Celebration of the MACH-2 Supercomputer at JKU</b></p> <p><b>10:00</b> Opening  <b>10:25</b> Music Intermezzo  <b>10:30</b> <b>Ulrich Rüde:</b> Supercomputing – Expanding the limits of predictability  <b>11:15</b> Music Intermezzo  <b>11:20</b> <b>Wolfgang Schreiner:</b> MACH 2  <b>11:30</b> Red Button (Virtual START of MACH 2) &amp; Closing  MACH 2 – viewing tours: 9:30, 11:40, 11:50, 12:00</p> <p><b>12:00</b> Trip to Courtyard Marriott  <b>12:30</b> Registration</p> <p><b>13:00</b> Lunch</p> <p><b>14:00</b> Keynote: <b>Dieter Kranzlmüller:</b> <b>General Purpose High Performance Computing as Competitive Advantage for Scientists</b></p> <p><b>14:50</b> <b>Francesco Zonta:</b> Turbulence annihilation in surface tension stratified flow</p> <p><b>15:10</b> <b>Alessio Roccon:</b> Breakup and coalescence of large drops in bounded turbulence: ...</p> <p><b>15:30</b> <b>Giovanni Soligo:</b> Phase Field Method to predict coalescence of clean and surfactant-laden droplets</p> <p><b>15:50</b> Coffee Break</p> <p><b>16:10</b> <b>Daniel Jodlbauer:</b> Parallelization of block-based preconditioners for fluid-structure interaction problems</p> <p><b>16:30</b> <b>Fabian Lackner:</b> Simulating the electronic response of atoms, molecules and solids to ultrashort laser pulses</p> <p><b>16:50</b> <b>Markus Oettel:</b> Quantum Chemistry on GPUs – a Status Report</p> <p><b>17:10</b> <b>Yin Wang:</b> Study of smart polymer using GPU accelerated molecular dynamics simulation</p> <p><b>17:30</b> Keynote: <b>Elmar Kiesling:</b> <b>Data-intensive Computing on Commodity Hardware: Hadoop and Beyond</b></p> <p><b>18:20</b> Dinner</p> <p><b>19:45</b> Internal Meeting</p>	<p><b>07:30</b> Breakfast</p> <p><b>09:00</b> Keynote: <b>Wolfgang Wagner:</b> <b>The Use of the VSC for Earth Observation Science</b></p> <p><b>09:50</b> Keynote: <b>Florian Berberich:</b> <b>PRACE – Accelerator for Research &amp; Innovation</b></p> <p><b>10:40</b> Coffee Break</p> <p><b>11:00</b> <b>The Usual Suspects and Beyond - Get to know HPC in Austria</b> Moderation: Peter Marksteiner (VSC)</p> <p><b>12:00</b> Lunch</p> <p><b>13:10</b> Keynote: <b>Oskar Mencer:</b> <b>Multiscale Dataflow Processing</b></p> <p><b>14:00</b> <b>Herbert Störi:</b> The Vienna Scientific Cluster – Status and Outlook</p> <p><b>14:20</b> <b>Markus Stöhr:</b> Software Containers on VSC</p> <p><b>14:40</b> <b>Karl Rupp:</b> Features of ViennaCL in PETSc</p> <p><b>15:00</b> <b>Thomas Ruh:</b> The Delta Project – Toward a Precision Benchmark Set for Solid State DFT</p> <p><b>15:20</b> Coffee Break</p> <p><b>15:40</b> <b>Tobias Schäfer:</b> Low complexity algorithms for many-body perturbation theory applied to 3D periodic materials</p> <p><b>16:00</b> <b>Michael Rader:</b> Accelerating Tensor Network Algorithms using GPUs</p> <p><b>16:20</b> <b>Christoph Hofer:</b> Efficient solvers for discontinuous Galerkin Space Time Isogeometric</p> <p><b>16:40</b> <b>Martin Neumüller:</b> A Space-Time Parallel Solver for Parabolic Problems</p> <p><b>17:00</b> <b>Andreas Schafelner:</b> Space-Time Finite Element Methods for Parabolic Initial-Boundary Value Problems with Variable Coeff.</p> <p><b>17:20</b> <b>Stefan Rosenberger:</b> SIMD Directed Parallelization for a Solver of the Bidomain Equations</p> <p><b>17:40</b> <b>Patrick Schiffmann:</b> Applications of Reinforcement Learning to Step Size Control in Multi Body Simulation</p> <p><b>18:00</b> Dinner</p> <p><b>19:30</b> Panel Discussion: <b>Future of HPC in Austria within Europe</b> Moderation: Irene Reichl (VSC)</p>	<p><b>07:30</b> Breakfast</p> <p><b>09:00</b> Keynote: <b>Karlheinz Meier:</b> <b>Computers like Brains</b></p> <p><b>09:50</b> <b>Thomas Rattei:</b> Software infrastructure for bioinformatics on LISC and VSC</p> <p><b>10:10</b> <b>Jürgen Zanghellini:</b> Elementary flux vectors, the missing piece in a unifying description of constraint-based modeling approaches of metabolism</p> <p><b>10:30</b> <b>POSTER SESSION</b></p> <p><b>11:00</b> Coffee Break</p> <p><b>11:20</b> <b>Christian Panigl:</b> ACOnet – High Performance Networking for R&amp;E in Austria</p> <p><b>11:40</b> <b>Susanne Naegele-Jackson:</b> Establishing Large-Scale Virtual Infrastructures with the GEANT Testbeds Service (GTS)</p> <p><b>12:00</b> Lunch</p> <p><b>13:00</b> <b>Tutorial Sessions:</b></p> <ul style="list-style-type: none"> <li>• <b>AllScale</b> (Herbert Jordan &amp; Philipp Gschwandtner, Uni. Innsbruck)</li> <li>• <b>Hadoop for HPC Users: Overview and First Steps</b> (Elmar Kiesling, TU Wien)</li> <li>• <b>Get Away From The Command Line: Simplifying Your HPC Workflow</b> (Daniel Marth, Catalysts GmbH)</li> </ul> <p><b>16:30</b> Coffee Break</p> <p><b>17:00</b> Closing</p> <p><b>18:00</b> Dinner</p>	<p><b>07:30</b> Breakfast</p> <p><b>09:00</b> <b>Bioinformatics Workshop</b></p> <p><b>10:40</b> Coffee Break</p> <p><b>11:40</b> Lunch</p> <p><b>13:00</b> <b>Bioinformatics Workshop</b></p> <p><b>15:00</b> Closing</p>	<p><b>InnoHPC Regional Workshop</b></p> <p><b>InnoHPC Regional Workshop</b></p> <p><b>InnoHPC Regional Workshop</b></p>	
					