

Intel® Software Development Tools for HPC – Workshop @ TU Dresden

Time		08.04.2020	09.04.2020
8:30	9:00	Registration & Welcome	Registration & Welcome
9:00	9:30	<p>The Intel® Architecture for Software Developers</p> <p>This session will offer insights into Intel® hardware platforms tailored to the needs of software developers, software architects and HPC experts. Learn how Intel® Software Development Tools will help you to achieve optimal performance via vectorization, memory access tuning, and threading.</p>	<p>Bring Your Own Code</p> <p>Apply the Intel® Software Development Tools on the local HPC system with the help of Intel experts</p>
9:30	10:00	<p>Intel® Parallel Studio - Software Development Tools for HPC</p> <p>This session will provide an introduction and overview over the different Software Developer Tools from Intel</p>	
10:00	10:45	<p>Intel® oneAPI</p> <p>Modern workloads are incredibly diverse—and so are architectures. No single architecture is best for every workload. Maximizing performance takes a mix of scalar, vector, matrix, and spatial (SVMS) architectures deployed in CPU, GPU, FPGA, and other future accelerators. Intel® oneAPI products will deliver the tools you need to deploy your applications and solutions across SVMS architectures.</p>	
10:45	11:00	Coffee Break	Coffee Break
11:00	11:30	<p>Intel® Compiler</p> <p>Get the best performance out of your code by using the right compiler options</p>	<p>Bring Your Own Code</p> <p>Apply the Intel® Software Development Tools on the local HPC system with the help of Intel experts</p>
11:30	12:00	<p>Intel® MPI Library</p> <p>Get the best performance out of your MPI application by tuning the Intel MPI library</p>	
12:00	13:00	Lunch	Lunch
13:00	14:00	<p>Intel® Advisor</p> <p>The Intel Advisor is the tool of choice for vectorization optimization and threading prototyping.</p>	<p>Bring Your Own Code</p> <p>Apply the Intel® Software Development Tools on the local HPC system with the help of Intel experts</p>
14:00	15:00	<p>Intel® VTune™ Profiler</p> <p>Without the right data, you're guessing about how to improve software performance and are unlikely to make the most effective improvements. The VTune Profiler collects key profiling data and presents it with a powerful interface that simplifies its analysis and interpretation.</p>	
15:00	15:30	Coffee Break	Coffee Break
15:30	16:00	<p>Intel® Trace Analyzer and Collector (ITAC)</p> <p>ITAC can help you to understand MPI application behavior across its full runtime.</p>	<p>Bring Your Own Code</p> <p>Apply the Intel® Software Development Tools on the local HPC system with the help of Intel experts</p>
16:00	16:30	<p>Intel® VTune™ Profiler</p> <p>Application Performance Snapshot</p> <p>Take a quick look at your application's performance to see if it is well optimized for modern hardware</p>	
16:30	17:15	<p>Intel® Distribution for Python</p> <p>Achieve faster Python application performance—right out of the box—with minimal or no changes to your code</p>	
17:15	17:30	Summary & Q&A	Summary & Q&A