

CCS International Symposium 2020  
**12th symposium on Discovery, Fusion, Creation of New Knowledge  
by Multidisciplinary Computational Sciences**

October 6, 2020

<https://www.ccs.tsukuba.ac.jp/sympo20201006en/>

Parallel Session 7: HPC systems

Time: 16:20 – 17:37 (JST)

Place: <https://zoom.us/j/98975445057>

Convenor: Daisuke Takahashi (CCS, University of Tsukuba)

<b>Time (5 + 2 min. each)</b>	<b>Speaker (Affiliation)</b>	<b>Title</b>
16:20 – 16:27	Daisuke Takahashi (University of Tsukuba)	Implementation of Parallel 3-D Real FFT with 2-D Decomposition on Intel Xeon Phi Clusters
16:27 – 16:34	Masahiro Nakao (RIKEN Center for Computational Science)	Development of parallel language XcalableMP 2.0 with high performance portability
16:34 – 16:41	Taisuke Boku (University of Tsukuba)	Computation and communication unified supercomputing with GPU+FPGA multi- accelerator
16:41 – 16:48	Miwako Tsuji (RIKEN Center for Computational Science)	Scalable communication performance prediction for exascale-codesign
16:48 – 16:55	Toshiyuki Imamura (RIKEN Center for Computational Science)	Reduced/extended/Mixed-precision matrix computations on FPGAs and GPGPUs
16:55 – 17:02	Naohito Nakasato (The University of Aizu)	Performance Evaluation of Various Floating-point Units
17:02 – 17:09	Kentaro Sano (RIKEN Center for	Development of Communication Subsystem for Inter-FPGA Networks

	Computational Science)	
17:09 – 17:16	Shunta Kikuchi (The University of Tokyo)	Network Intrusion Detection System based on Hybrid FPGA/GPU Pattern Matching
17:16 – 17:23	Toshihiro Hanawa (The University of Tokyo)	Investigation of offloading with transprecision on FPGA and GPU