hyPACK-2013 Feedback Form

Participant's Name:_____ **E-mail Address:**_____

(**Note**: Fill or tick (✓) the boxes)

Sessions	Excellent	Good	Above Average	Average
Day 1: October 15, 2013 (Tuesday)				
1. An overview of HyPACK-2013 Workshop	☐	☐	☐	☐
2. Classroom Lecture & Lab. : An Overview of Intel Xeon-Phi Arch. & Programming Models; OpenMP Prog. & Performance Issues - Numerical Computations – Lab Sessions	☐	☐	☐	☐
3. Classroom Lecture & Lab.: An Overview of Intel Xeon-Phi – System Software; X86 SMP Compiler & Vectorization; Native Compilation & Compiler Offload Pragmas; Performance Issues - Numerical Computations – Laboratory Sessions	☐	☐	☐	☐
4. Classroom Lecture & Demonstration: Intel Xeon-Phi Architecture – Prog. Models - Compilation features; Compiler tips, Compiler Vectorization reports; Compiler Directives & Demonstration Benchmarks - OpenMP on Xeon Host and Xeon-Phi Coprocessor	☐	☐	☐	☐
5. Lab. Session: Hands-on session on Intel Xeon-Phi Coprocessor – OpenMP framework on Intel Xeon-Phi – Tuning & Performance	☐	☐	☐	☐
6. Lab. Session: Programming – Intel Xeon-Phi Compiler Offload Pragmas; Compiler Technology & Vectorization – Numerical Computations	☐	☐	☐	☐
7. Demonstration & Lab. Session: Mixed Programming (MPI, OpenMP, Cilk Plus, Intel TBB, Pthreads); Compilation & Vectorization - Numerical Computations based on Intel MKL on Xeon Phi Coprocessors; Tuning and Performance of Benchmarks on Intel Xeon-Phi; Compilation – Intel Off load pragmas	☐	☐	☐	☐
8. Keynote Talk (Academic) : Numerical Linear Algebra (NLA); Intel MKL - Performance on Intel Xeon-Phi Coprocessors	☐	☐	☐	☐
9. Lab. Session: Intel Xeon-Phi Prog **(**OpenMP, TBB, Pthreads); Performance of Benchmarks – Numerical Computations: Compiler Optimizations & Vectorization; Intel MKL Math Kernels on Xeon Phi; Thread Affinity – OpenMP & Pthreads on Intel Xeon Phi; Performance of Application Kernels on Intel Xeon-Phi	☐	☐	☐	☐
10. Invited Talk : An Overview of MPI programming - Intel Xeon-Phi Coprocessors & Performance Issues	☐	☐	☐	☐

Sessions	Excellent	Good	Above Average	Average
Day 2: October 16, 2013 (Wednesday)				
11. **Classroom Lecture & Lab:** Prog. Intel Xeon Phi – Prog. Affinity Concepts Intel Xeon-Phi Programming Models – Intel TBB, Overview of Co-Processor Prog. Models; Tuning & Performance of NLA Kernels	☐	☐	☐	☐
12. **Classroom Lecture & Lab:** Prog. Intel Xeon Phi -Compiler Options; Cilk Plus Compiler tips, Compiler Vectorization reports; Compiler Directives – Memory alignment; Math Kernel Library - Performance Results	☐	☐	☐	☐
13. **Classroom Lecture & Lab :** MPI execution models on Intel Xeon and Intel Xeon Phi coprocessors, including pure MPI or hybrid MPI applications	☐	☐	☐	☐
14. **Keynote Talk (Industry): Speaker: Intel - Topic :** An Overview of Intel Xeon-Phi Co-processor Archi.; An Overview of Co-Processor System Software; Compiler Offload Pragmas & Tuning for performance on Xeon Phi(tm) coprocessor using VTune Amplifier XE	☐	☐	☐	☐
15. **Keynote Talk (Industry): Speaker: Intel - Topic :** Intel Xeon Phi / Demos: Compilers, VTune Amplifier Demonstrate Compilers and VTune AXE on Intel ; Tuning methodologies; Intel(r) Trace Analyzer and Collector (ITAC) on MIC	☐	☐	☐	☐
16. **Demonstration & Lab. Session:** MPI execution models on Intel Xeon processors and Intel Xeon Phi coprocessors, including pure MPI or hybrid MPI applications.; Mixed Prog. (MPI-OpenMP, MPI-TBB, OpenCL, Pthreads); Basic Programs based on Intel Xeon-Phi Co-processors; Bandwidth Calculation Matrix Computations; Using Intel Xeon-Phi Tools for Numerical Computations	☐	☐	☐	☐
17. **Keynote Talk (Industry) : Speaker** : **Intel** Performance of Application Kernel – based on OpenMP /MPI - Intel Xeon-Programming Framework	☐	☐	☐	☐
18. **Lab. Session:** Mixed Prog. (MPI-OpenMP, MPI-TBB, MPI-Pthreads) on Intel Xeon Co-Processors; I/O files on Intel Xeon Co-processors; Memory Map (mmap) Examples on Intel Xeon-Phi Co-processors; MPI Prog. for Numerical Computations on Intel Xeon Phi; Intel Tool Kit Demonstration	☐	☐	☐	☐
19. **Classroom Lecture & Lab (part-II):** Prog. Intel Xeon Phi – Memory Map (mmap) & Huge Page Enabling				

What could you suggest to make this hyPACK-2013 (Xeon-Phi Coprocessors) module better in content or format?

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Day 3: October 17, 2013 (Thursday)				
20. **Classroom Lecture & Lab** : Introduction to GPU Computing : Memory Optimization; Tuning & Performance on CUDA enabled NVIDIA GPUs;	☐	☐	☐	☐
Sessions	**Excellent**	**Good**	**Above Average**	**Average**
21. **Classroom Lecture & Lab**: CUDA – enabled NVIDIA GPUs – Use of CUDA Toolkit Math Libraries – OpenACC Pragmas Framework – CUDA Enabled NVIDIA Multi-GPUs	☐	☐	☐	☐
22. **Keynote Talk (Industry) : Speaker : NVIDIA -** An Overview of CUDA enabled NVIDIA GPUs – Prog Issues	☐	☐	☐	☐
23. **Keynote Talk (Industry) : Speaker : NVIDIA -** An Overview of CUDA enabled NVIDIA GPUs – Programming & Performance Issues	☐	☐	☐	☐
24. **Lab. Session & Demonstration :** Lab. Session: An overview of CUDA enabled NVIDIA GPUs / OpenCL – GPGPUs/Example Programs	☐	☐	☐	☐
25. **Lab. Session & Demonstration**: Tuning & Performance on CUDA enabled NVIDIA-GPUs; Matrix-matrix multiplication - tiled techniques for partitioning of a matrix, shared memory optimization, Warp level parallelism; Tuning & Perf. on Multi-GPUs- NVIDIA-GPUs	☐	☐	☐	☐
26. **Keynote Talk (Academic):** Tuning & Performance on CUDA NVIDIA GPUs	☐	☐	☐	☐
27. **Lab. Session & Demonstration:** Application kernels based on Mixed Prog. (MPI-CUDA, Pthreads-CUDA & OpenMP-CUDA); CUDA SDK ToolKit Demonstration; Prog. On Heterogeneous Comp. Platforms – AMD-APP; OpenCL Programs on AMD-APP GPUs; Use of Work Groups & Work-items – Memory Opt. Prog. on ARM Multi-Cores with CUDA NVIDIA carma – Using NVML APIs	☐	☐	☐	☐
28. **Class-room Lecture & Demonstration :** Measurement of Power Consumption–Performance of Application Kernels – Using NVML Lib Calls	☐	☐	☐	☐
Day 4: October 18, 2013 (Thursday)				
29. **Classroom Lecture & Lab** : Heterogeneous Programming – CUDA enabled NVIDIA GPUs /AMD APP – OpenCL; Tuning & Performance – Matrix Computations; AMD APP Tech. – SDK & Prog. Env /Libraries	☐	☐	☐	☐
30. **Classroom Lecture & Lab :** An Overview of HPC GPU Cluster – OpenCL Performance Issues – Numerical Linear Algebra; AMD APP Tech –Tuning & Performance OpenCL; Demonstration of Application Kernels	☐	☐	☐	☐

31. **Keynote Talk (Industry):** Measurement of Power Consumption – Systems with Coprocessors/Accelerators; Case Studies - Partial differential Eqs – Solution of Matrix Systems on Cluster with Single /Multiple GPUs	☐	☐	☐	☐
32. **Keynote Talk (Academic):** Perf. of Application Kernels on Parallel Processing Platforms with GPU Accelerators	☐	☐	☐	☐
Sessions	**Excellent**	**Good**	**Above Average**	**Average**
33. **Lab. Session & Demonstration:** Hands-on session on NVIDIA GPUs /AMD OpenCL;Prog. on ARM Multi-Core system with CUDA NVIDIA carma – Using NVML APIs	☐	☐	☐	☐
34. **Lab. Session - Demonstration:** Programming based on OpenCL, Tuning & Performance of OpenCL on GPGPUs; matrix-matrix multiplication – algorithms based on OpenCL; Shared memory optimization, Wavefront level parallelism; – Memory Optimizations	☐	☐	☐	☐
35. **Keynote Talk (Academic):** An Overview of Application Kernels on Parallel Processing Systems with Multi-GPU – Power aware Performance Issues – NVML Library calls & external Power-Off Meter	☐	☐	☐	☐
36. **Lab. Session:** Example programs on host-cpu (Pthreads, MPI, OpenMP) and OpenCL on Multiple GPUs; Tuning & Performance of Matrix Computations on AMD-APPs; Memory Optimization on AMD APP– OpenCL; Application kernels based on Mixed Prog. (MPI,Pthreads, OpenMP- with OpenCL); OpenCL programs for Numerical Linear Algebra on HPC GPU Cluster (OpenCL on NVIDIA/AMD-APP GPUs) Benchmarks	☐	☐	☐	☐

37. What could you suggest to make this **hyPACK-2013** module better in content or format?

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38. Did the **hyPACK-2013** module: meet ☐ not meet ☐ exceed your expectations ☐ ?

39. Was the **hyPACK-2013** module course is adequate? ☐ Yes ☐ No
If not, why not? _____

40. Was the **hyPACK-2013** module too short ☐ about right ☐ too long ☐?

41. Was **hyPACK-2013** module Examination pattern is good ☐ Yes ☐ No ?

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