

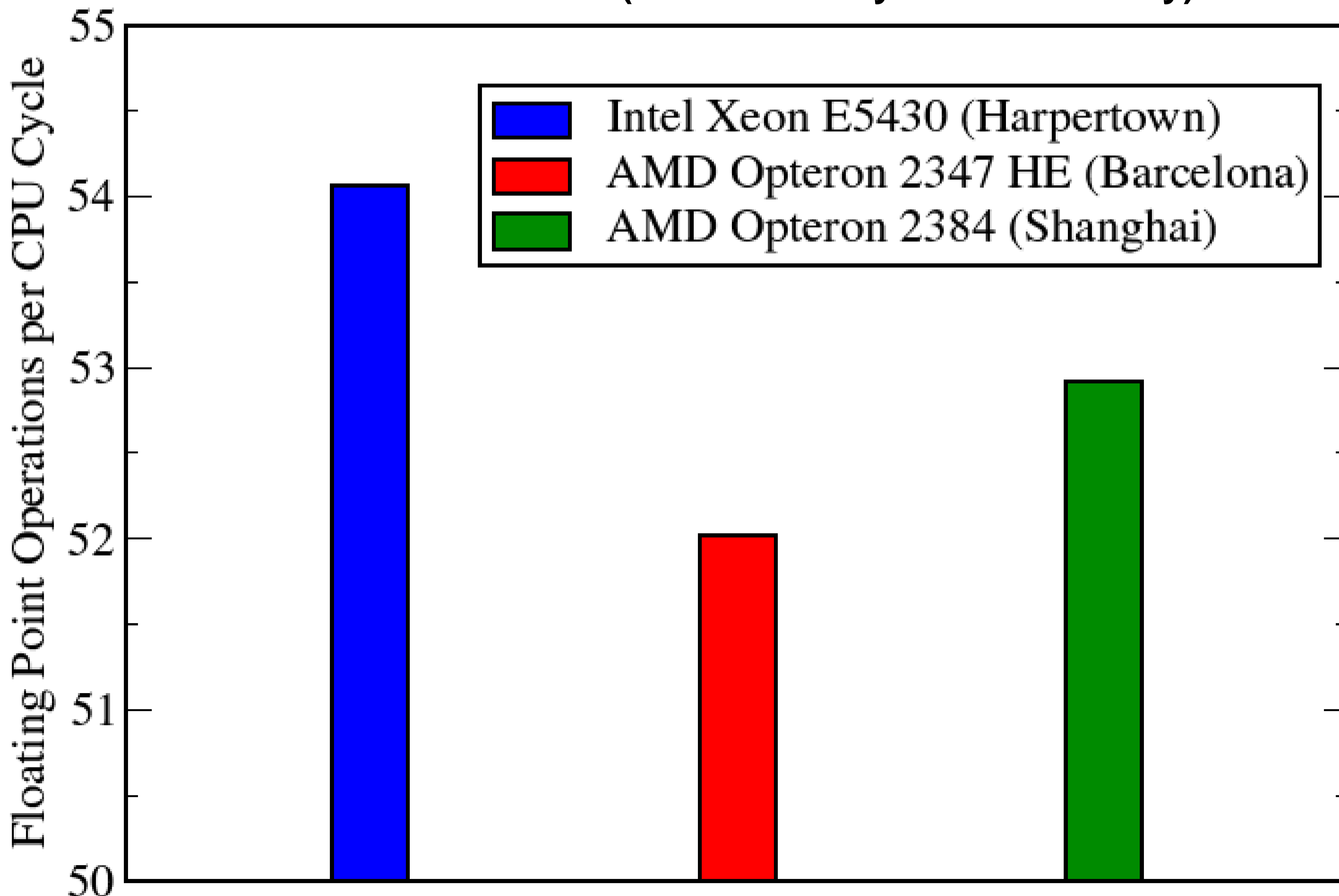
Dell and SCC KIT: Working together and

finding

- AMD and Dell, first Benchmarks at Karlsruhe Institute of Technology (KIT). A 16 node cluster runs latest Quad-Core AMD Opteron (Shanghai, 2384, 2.7 GHz), only 677 MHz bus frequency!
- qLogic InfiniBand infrastructure (x4, DDR)
- serial application performance compared with IBM x3550 (Xeon Quad-Core, E5430, 2.6 GHz)
- parallel benchmark (HPL) compared with IBM x3550 and AMD Opteron (HE 2347, 1.9 GHz)

	E5430 (x1) (real in s)	E5430 (x4) (real in s)	E5430 (x8) (real in s)	2384 (x1) (real in s)	2384 (x4) (real in s)	2384 (x8) (real in s)
serial application(60 MByte main memory)	15,4	20,5	48,7	13,7	15,5	27,5
serial application(183 MByte main memory)	71	136	277	65	89	150

HPL-Benchmark: N=62000 (95% of 16 GByte main memory)



- 2 nodes x 8 cores = 16 parallel processes
- SL 4.x (Kernel 2.6.9)
- GotoBLAS 1.24 (GCC 3.4.x)
- MPI : MVAPICH 1.0.0
- InfiniBand Stack: OFED 1.3