



IHPCSS16 Hybrid Challenge

Results

David Henty
d.henty@epcc.ed.ac.uk
EPCC, University of Edinburgh

Stats: Language, MPI+X, Reported Time

F	ACC	7.35
F	ACC	7.57
C	ACC	7.80
C	ACC	8.87
C	ACC	24.00
F	ACC	26.30
F	ACC	41.50
C	ACC	44.30
C	ACC	112.00
C	ACC + OMP	77.00
F	OMP	20.80
C	Pure OMP	35.00
F	OMP	40.30
F	OMP	40.33
C	OMP	40.69
C	OMP	41.00
C	OMP	41.54
C	OMP	42.70
C	OMP	45.00

- Pure OpenMP on Xeon Phi!

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```
#SBATCH -t 01:00:00
```

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#SBATCH -t 01:00:00
#SBATCH -N 1
#SBATCH --ntasks-per-node 1
#SBATCH -p LM
#SBATCH -c 576
```

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#SBATCH -t 01:00:00
#SBATCH -N 1
#SBATCH --ntasks-per-node 1
#SBATCH -p LM
#SBATCH -c 576
##SBATCH --res=IHPCSS
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export OMP_NUM_THREADS=$NTHREAD
#export OMP_NESTED=TRUE
(time ./${OMPPROG}) 2>&1
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 - Robert Chiodi

OpenACC winner

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- But ... had removed some prints
 - put back in: still best at 7.35
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```
mpif90 -acc -fast laplace_impi.f90
#SBATCH -N 4
#SBATCH -p GPU
#SBATCH --ntasks-per-node 4
#SBATCH --gres=gpu:4
#SBATCH -t 1
#SBATCH --reservation=IHPCSS

#export PGI_ACC_TIME=1
mpirun -n 16 ./a.out
```