Dirac operator - Lumi (64x32x32x64 periodic global lattice, 128x64x64x64 C* global lattice) ideal scaling ideal scaling 1024 **GPU** periodic GPU periodic 512 -**GPU C*** GPU C* 10^{-1} CPU periodic CPU periodic 256 -CPU C* CPU C* 128 average time [sec] 10^{-2} 64 speedup 32 -10⁻³ 16 8 4 10^{-4} 2 10^{-5} 256 512 1024 256 512 1024 128 128 64 64 number of GPUs/nodes number of GPUs/nodes