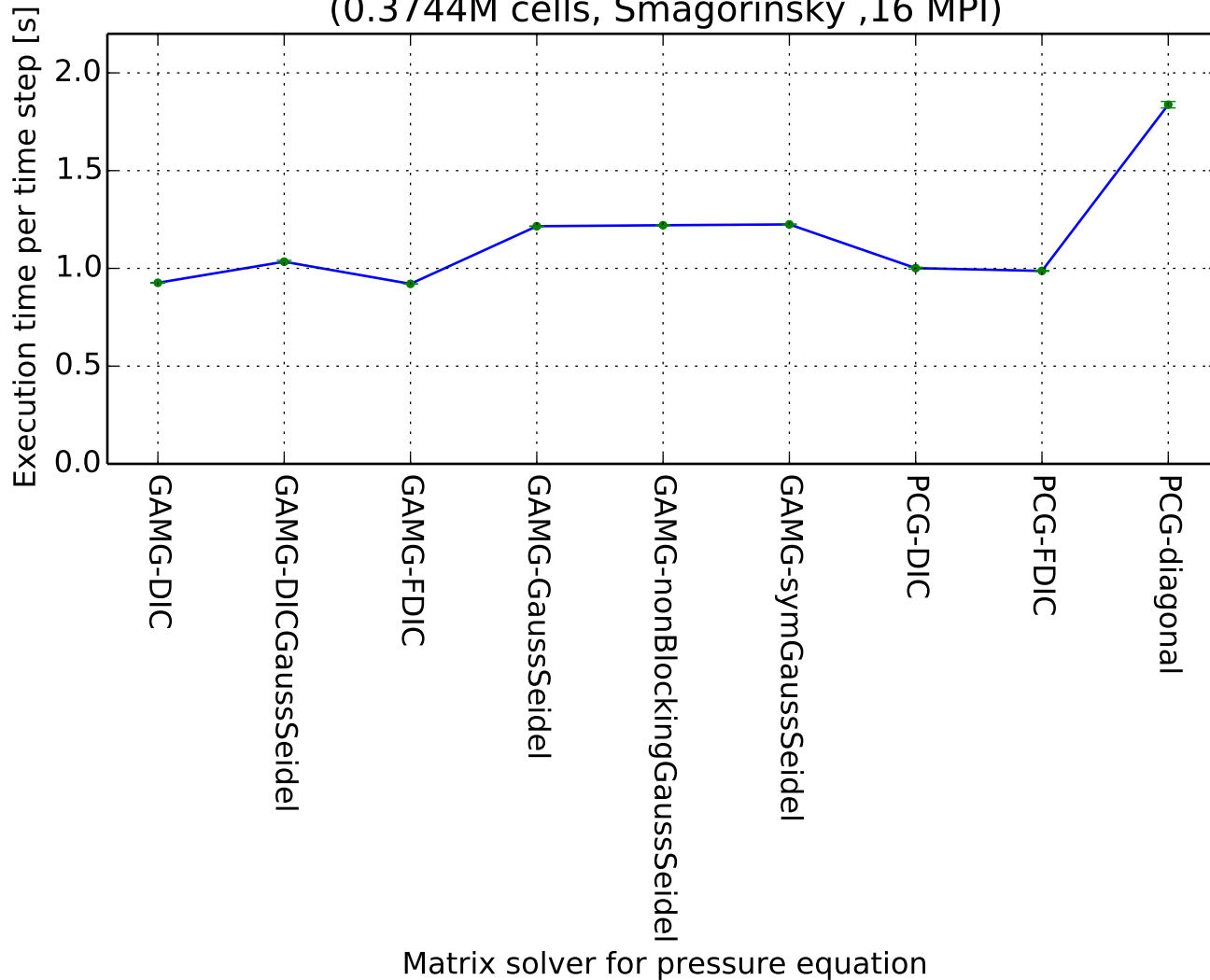
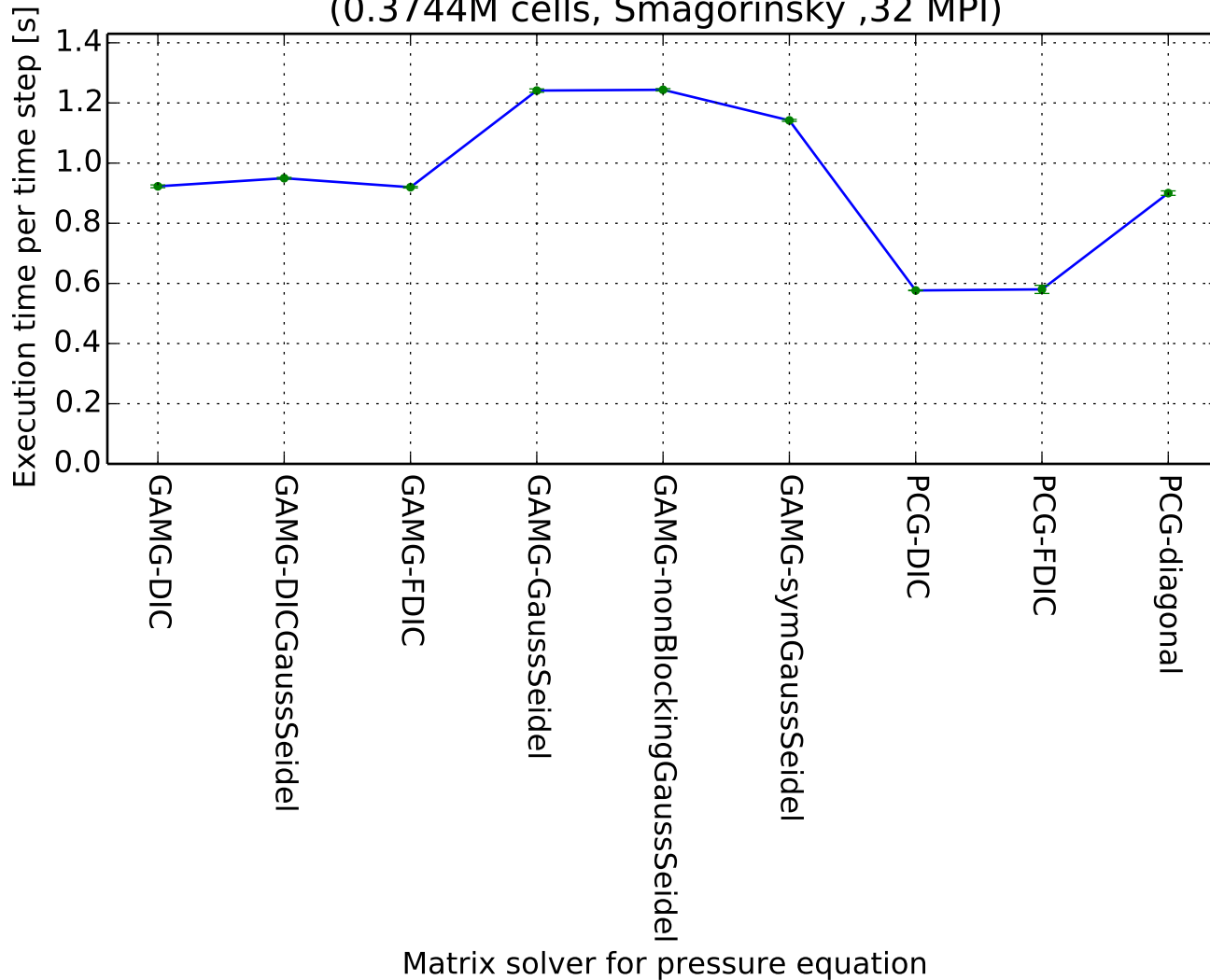


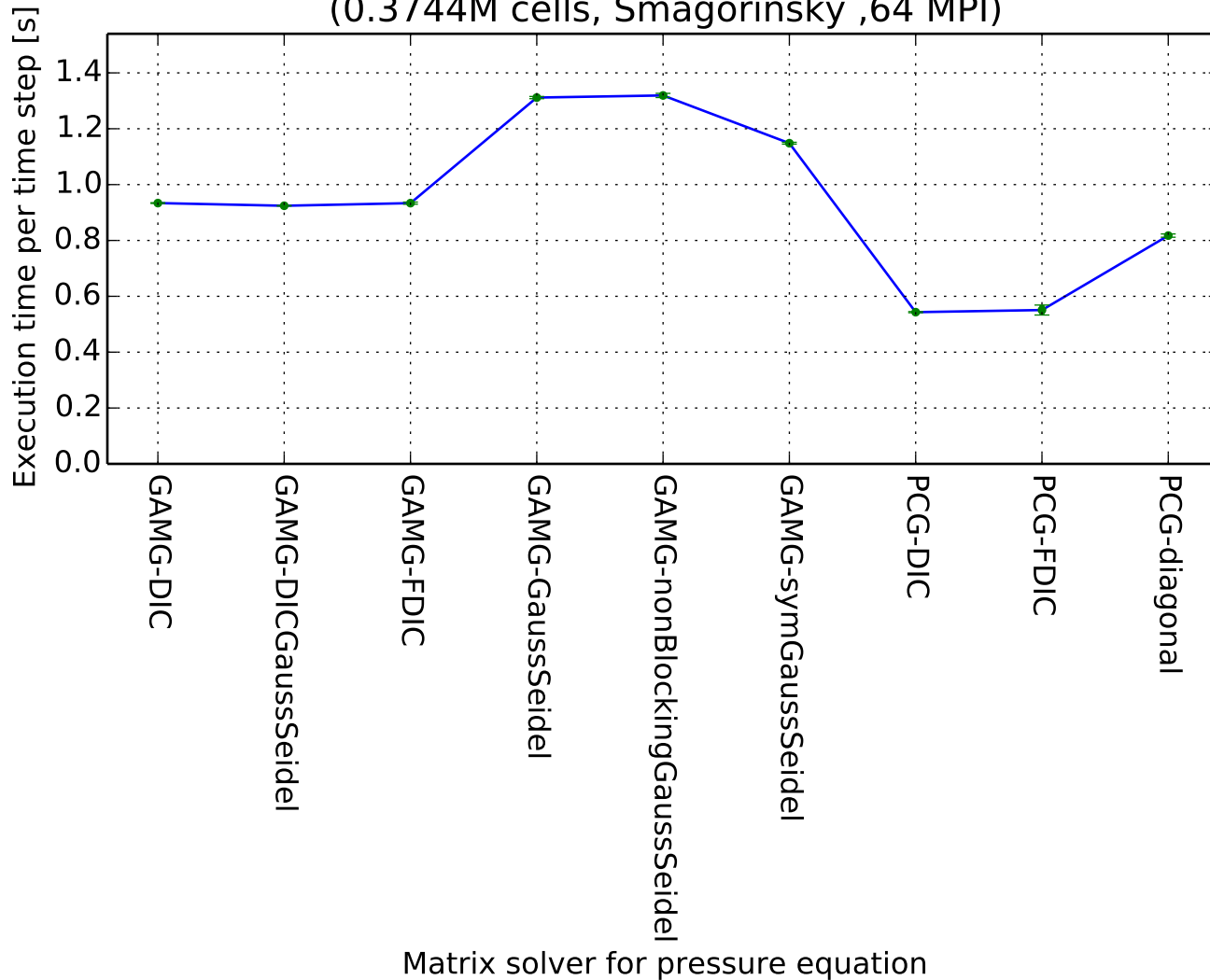
Execution time per time step
(0.3744M cells, Smagorinsky ,16 MPI)



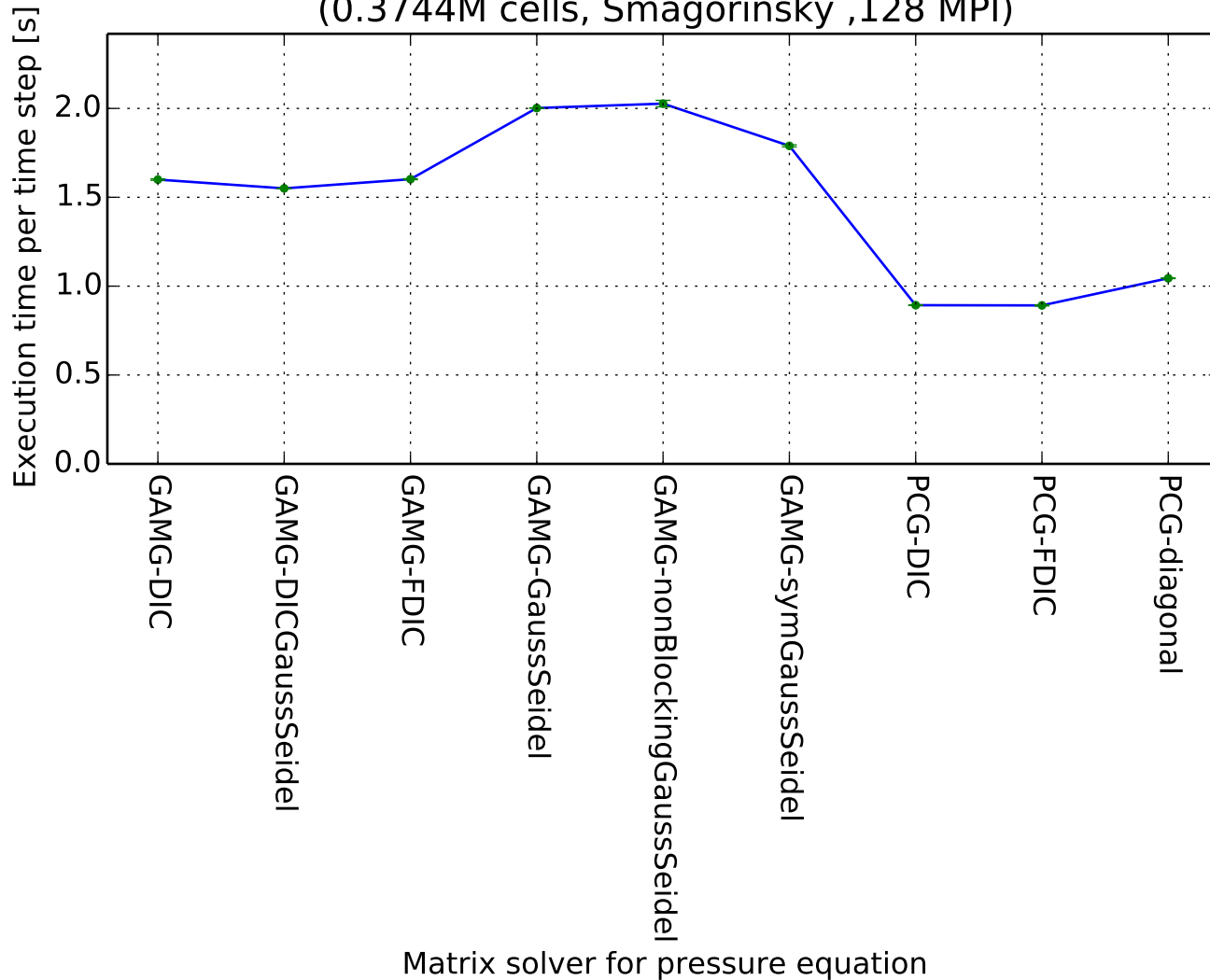
Execution time per time step
(0.3744M cells, Smagorinsky ,32 MPI)



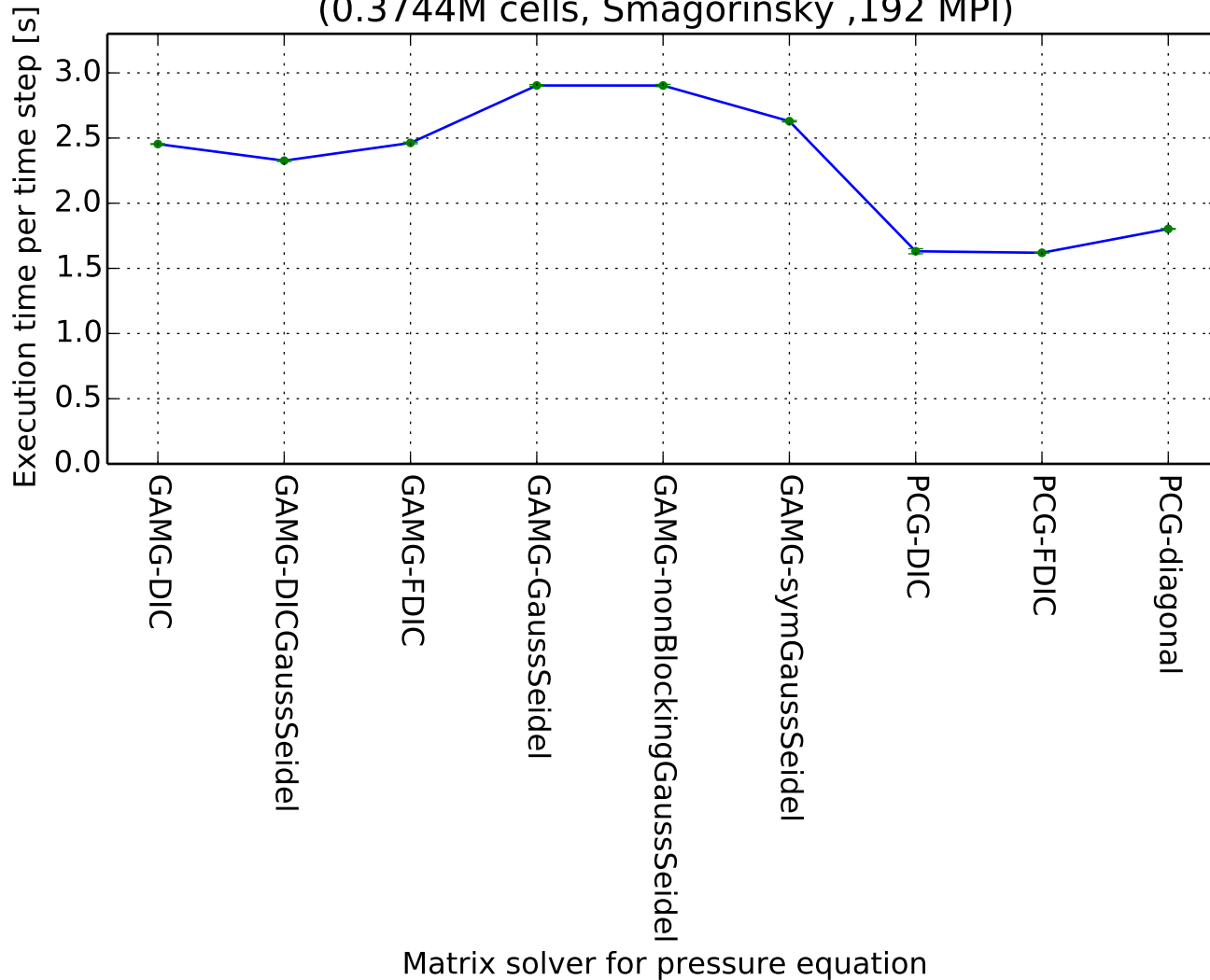
Execution time per time step
(0.3744M cells, Smagorinsky ,64 MPI)



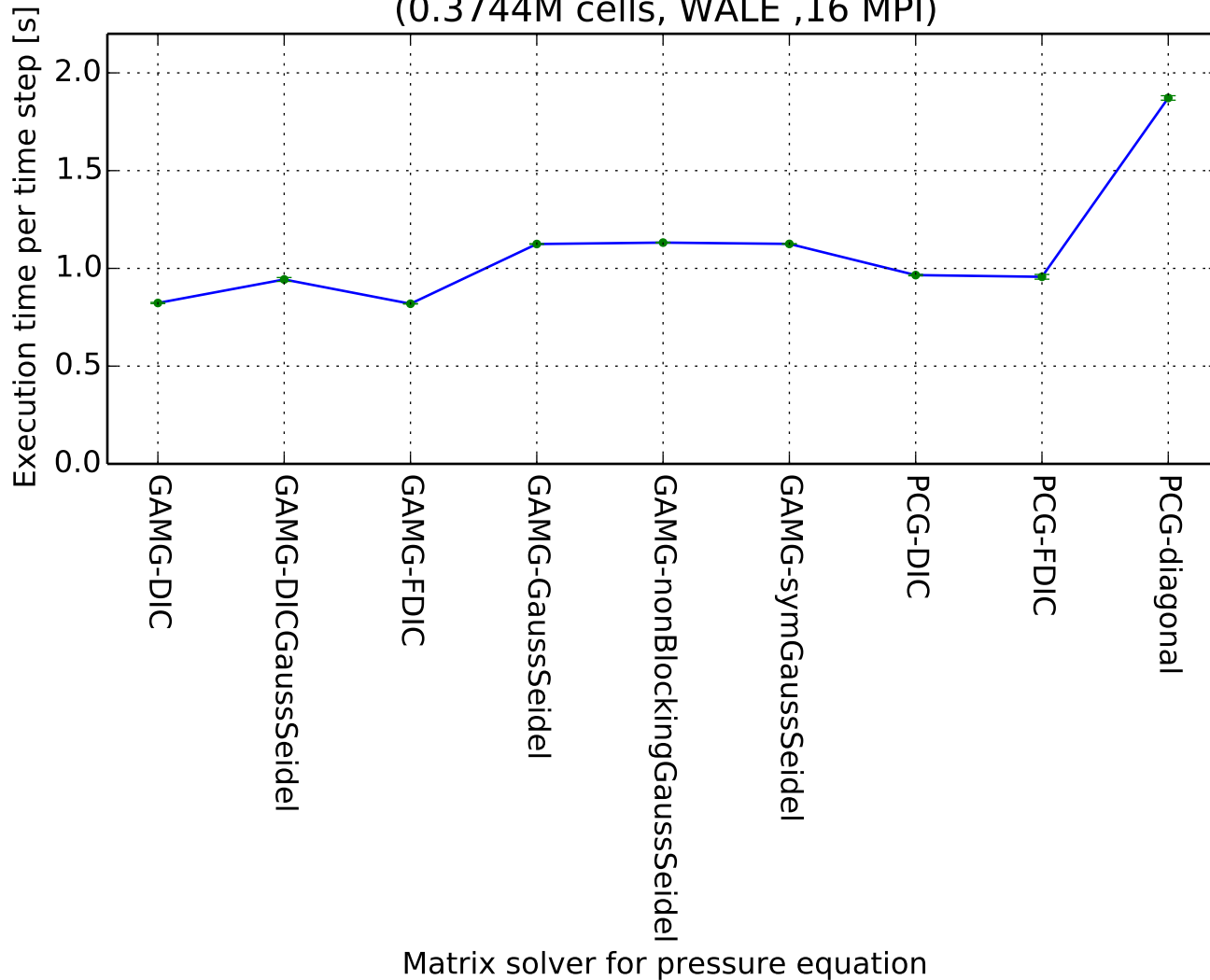
Execution time per time step
(0.3744M cells, Smagorinsky ,128 MPI)



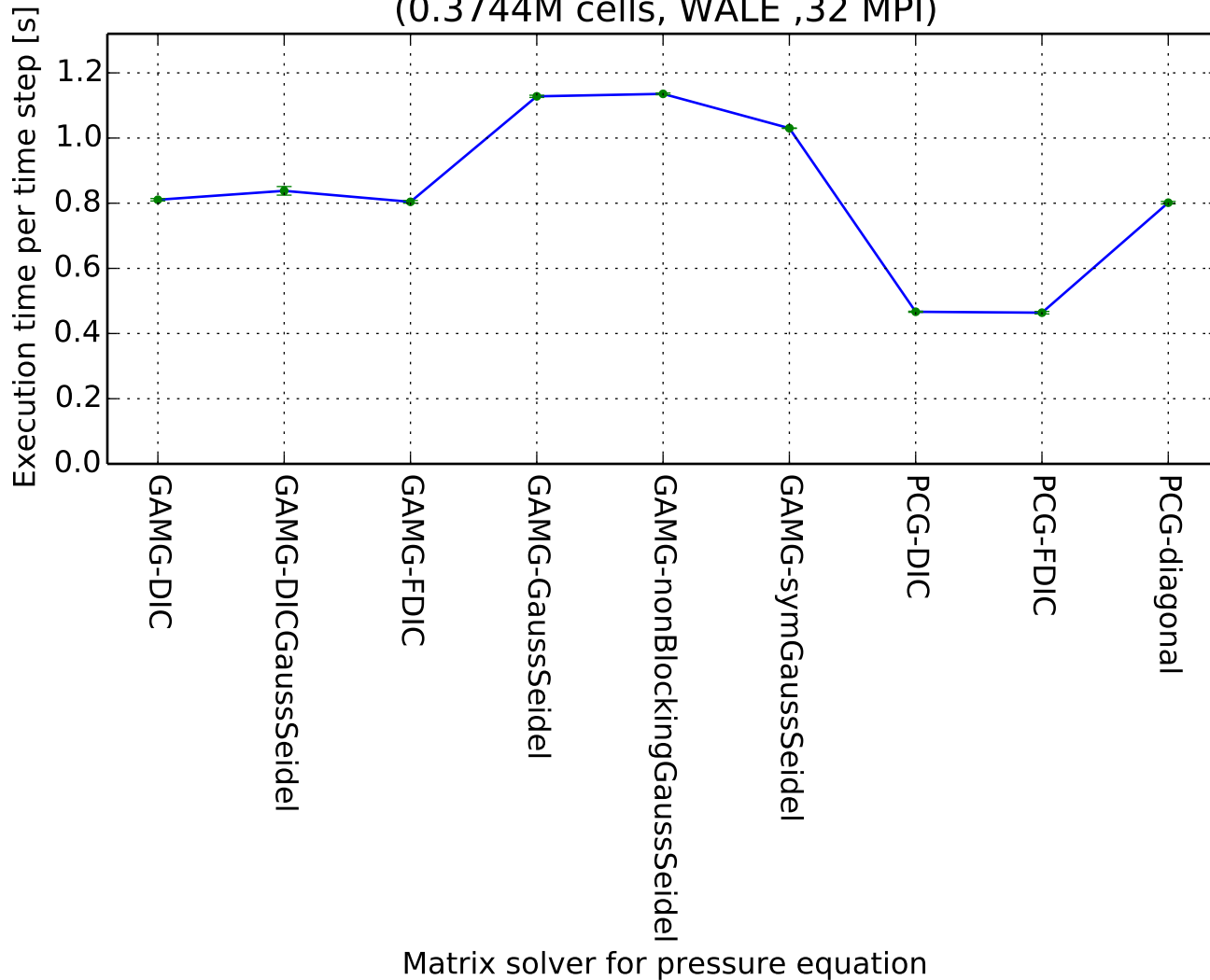
Execution time per time step
(0.3744M cells, Smagorinsky ,192 MPI)



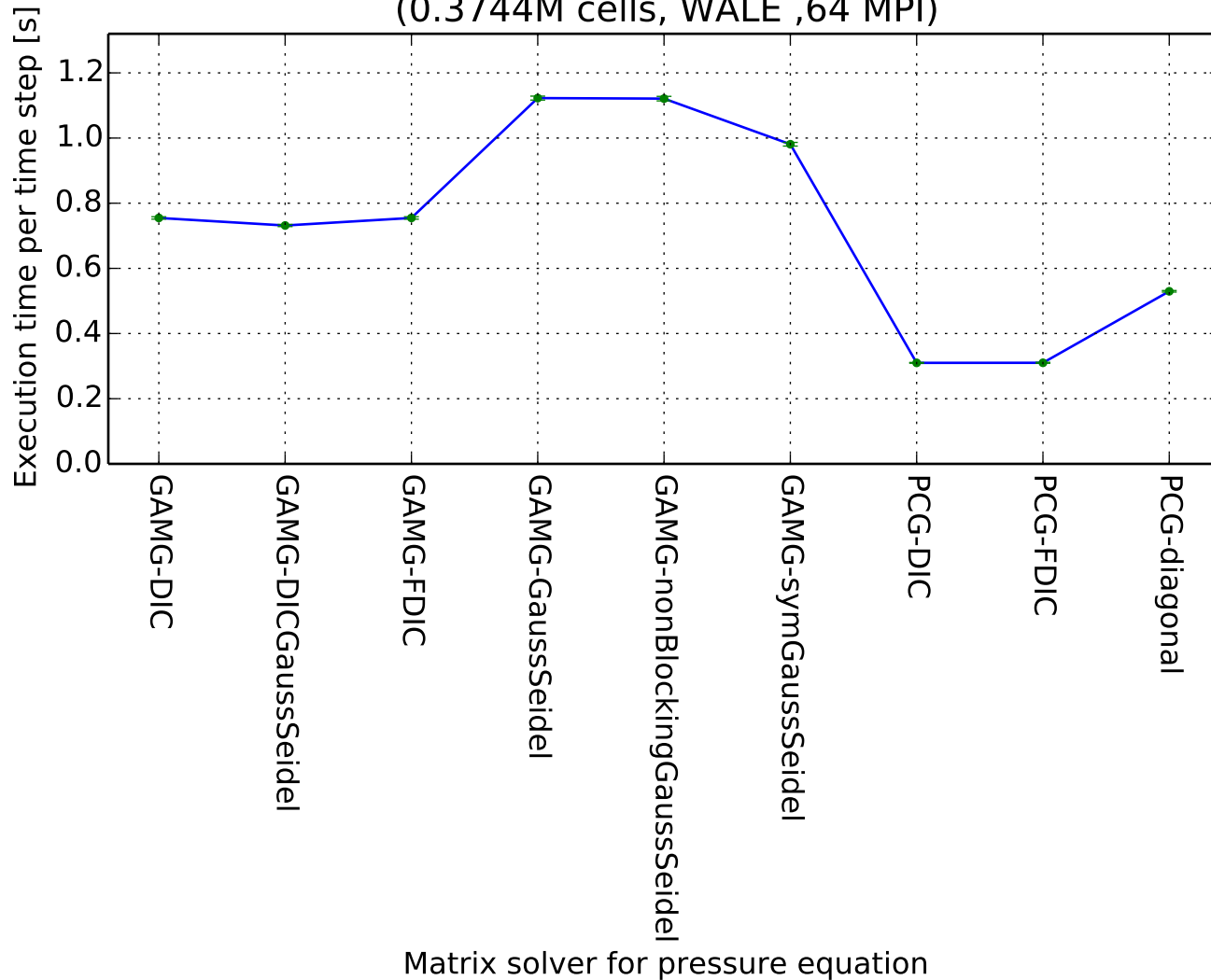
Execution time per time step
(0.3744M cells, WALE ,16 MPI)



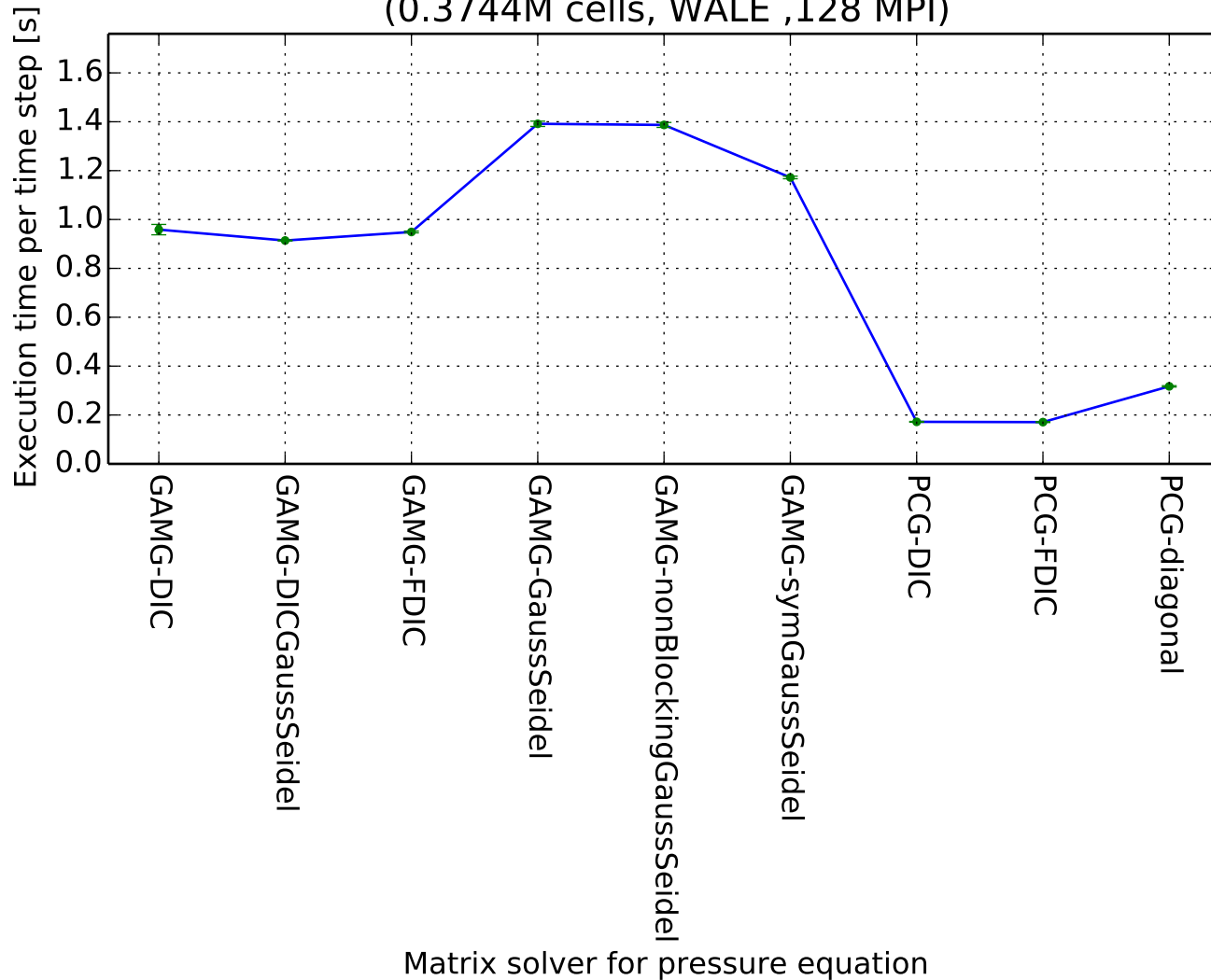
Execution time per time step
(0.3744M cells, WALE ,32 MPI)



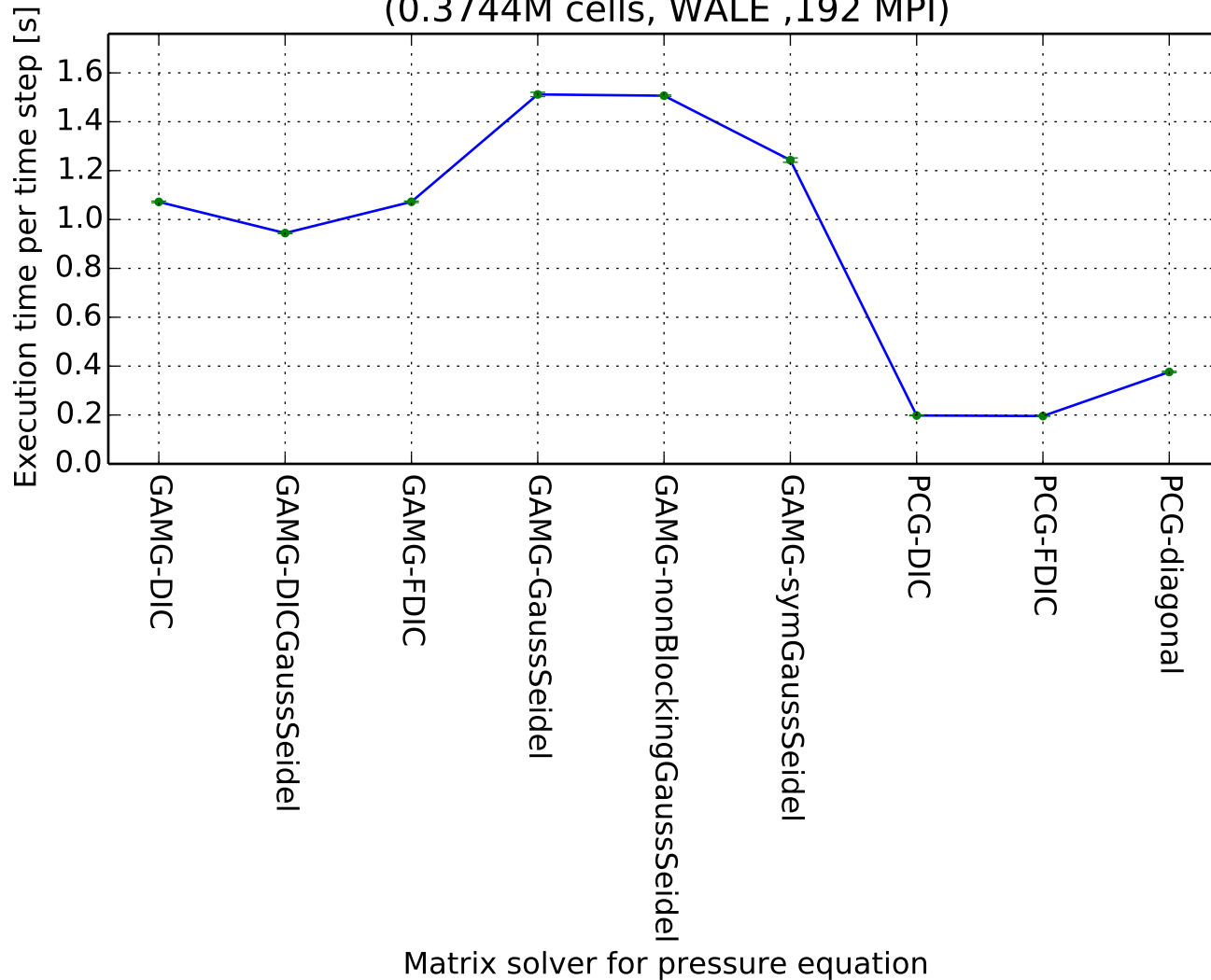
Execution time per time step
(0.3744M cells, WALE ,64 MPI)



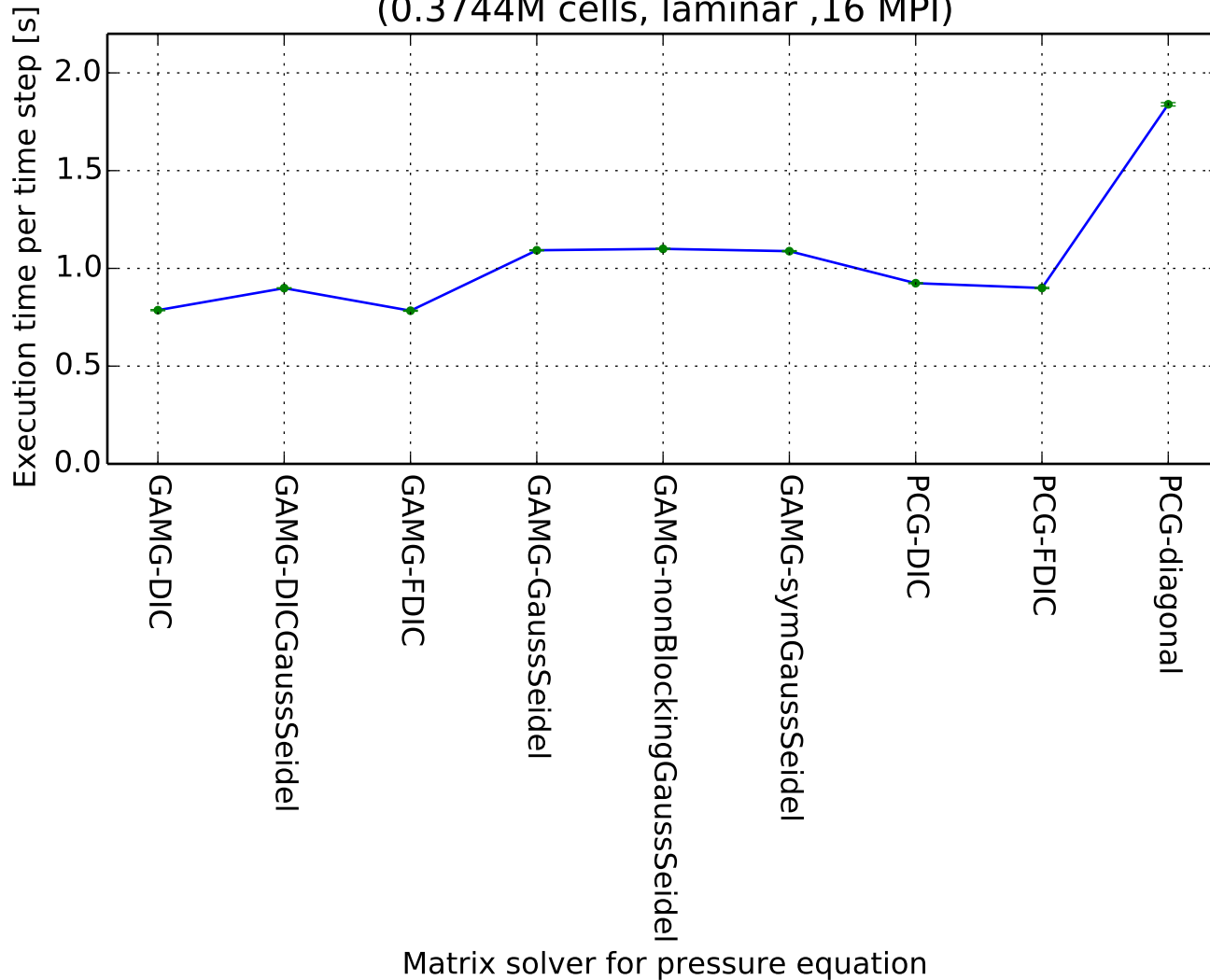
Execution time per time step
(0.3744M cells, WALE ,128 MPI)



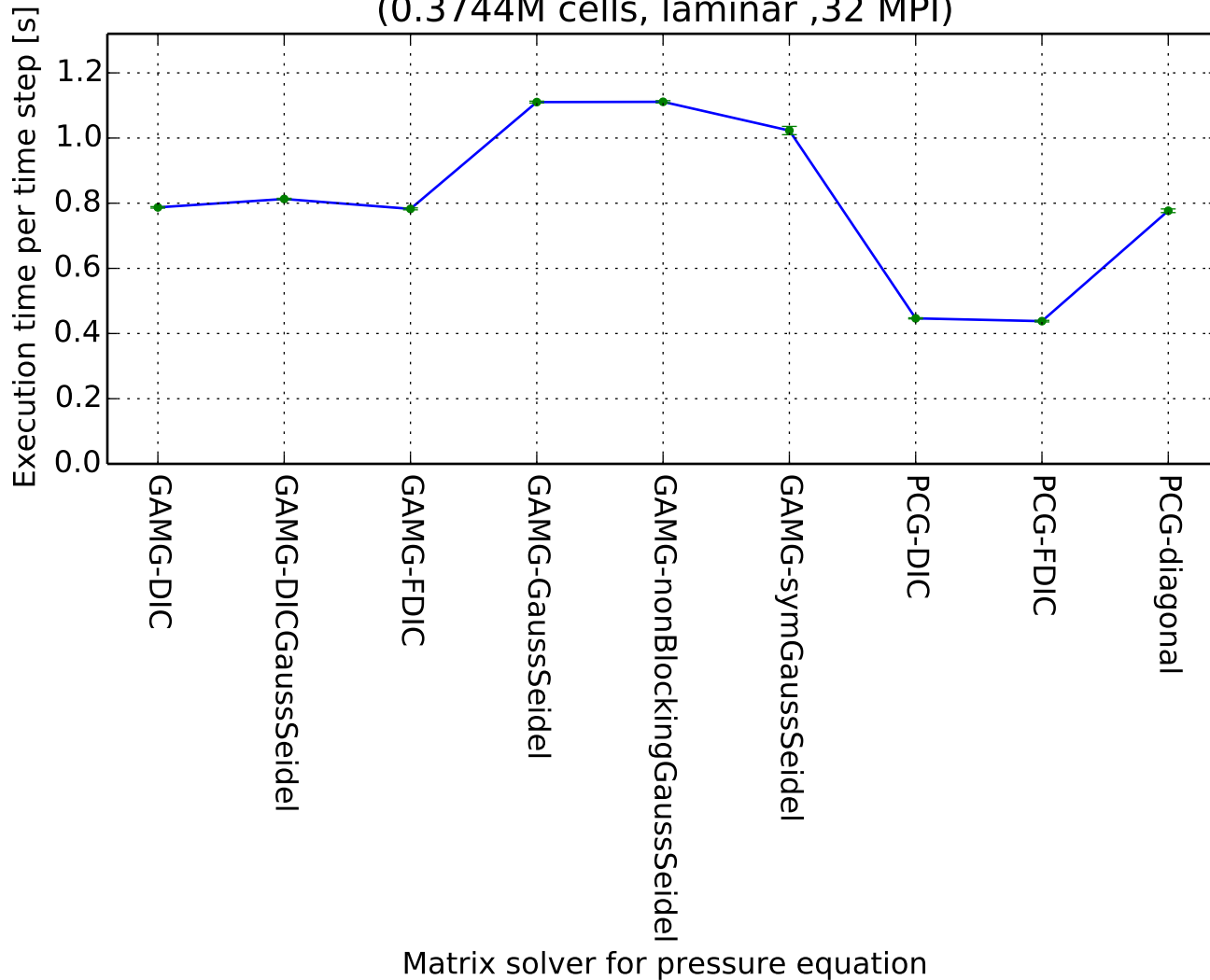
Execution time per time step
(0.3744M cells, WALE ,192 MPI)



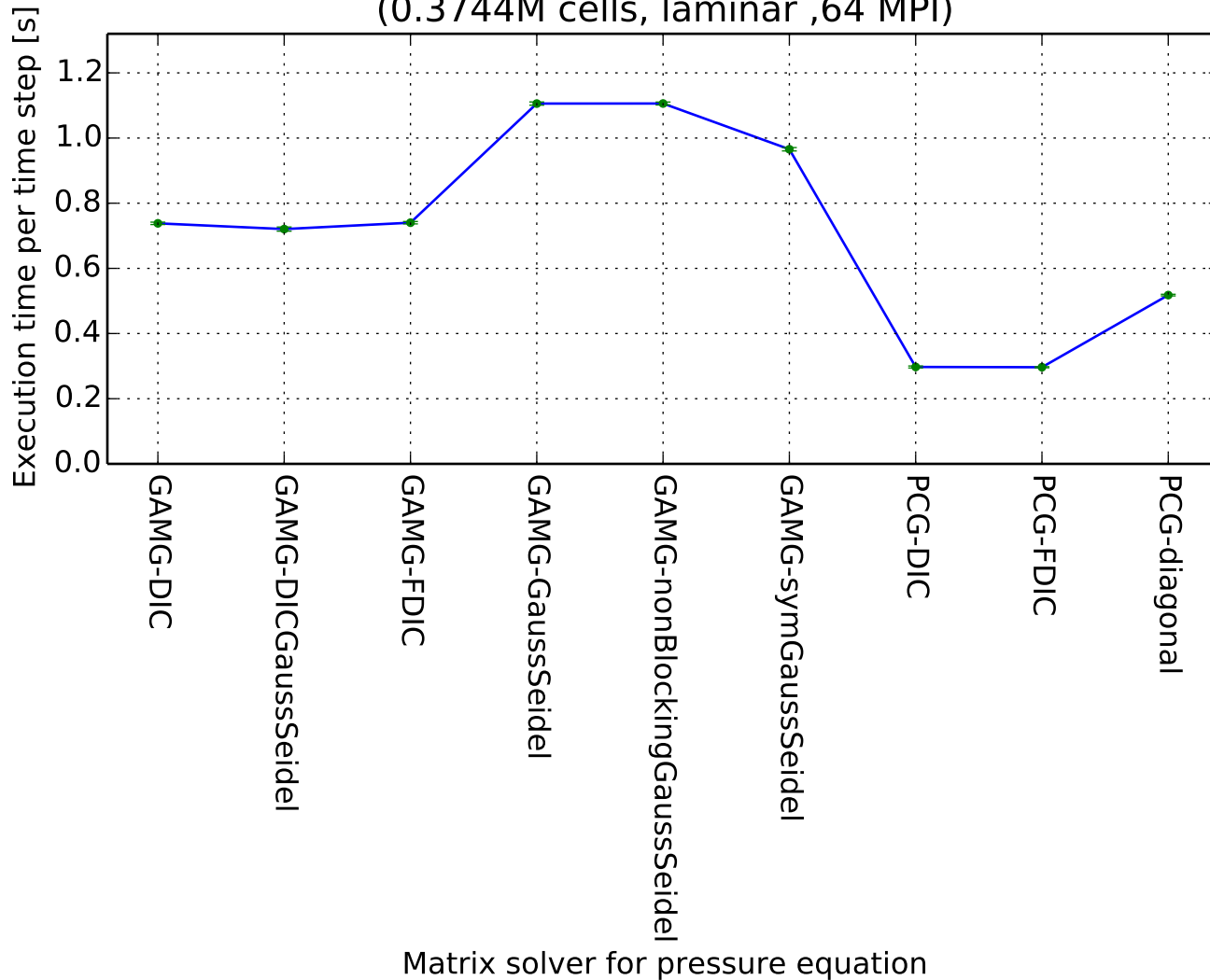
Execution time per time step
(0.3744M cells, laminar ,16 MPI)



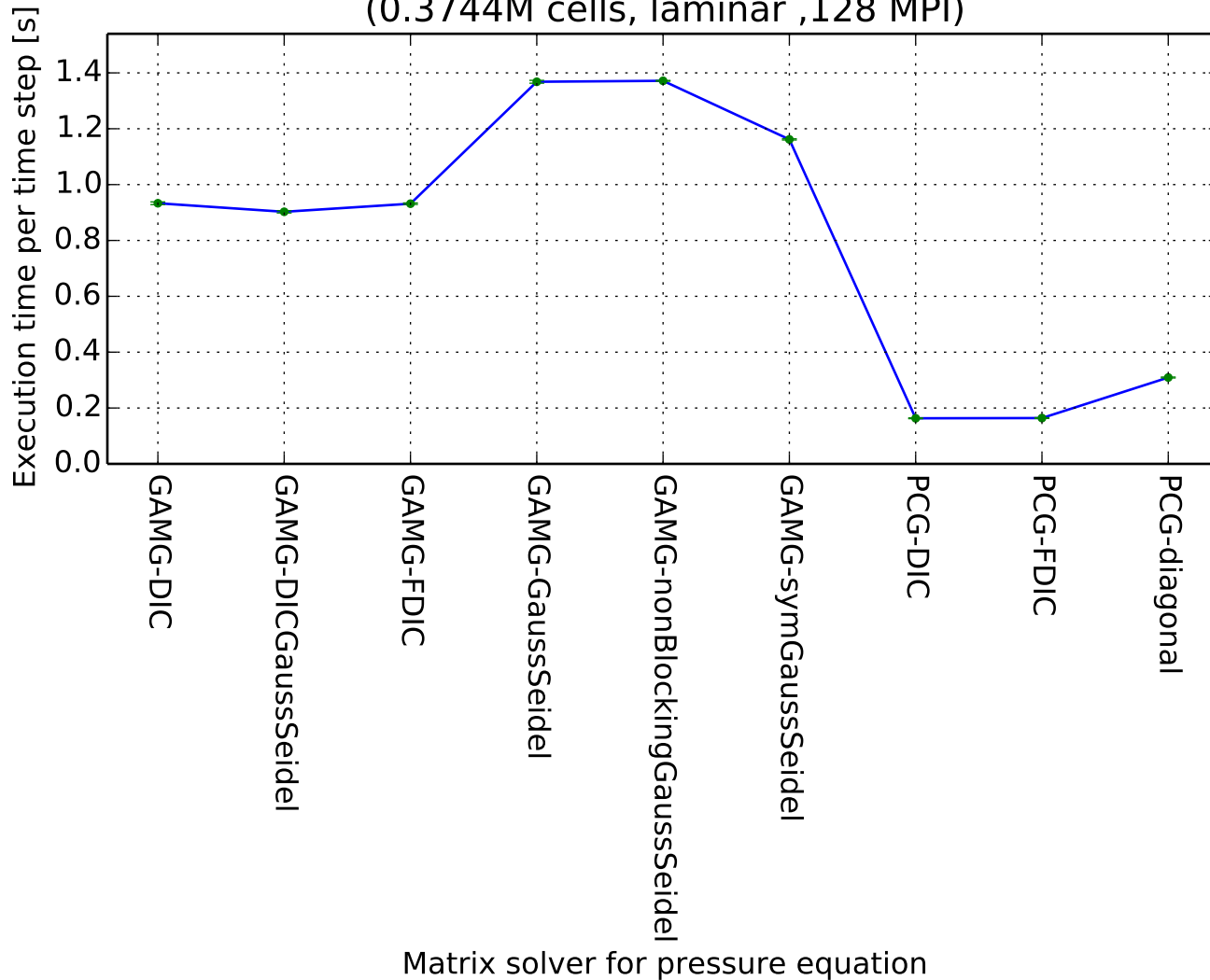
Execution time per time step
(0.3744M cells, laminar ,32 MPI)



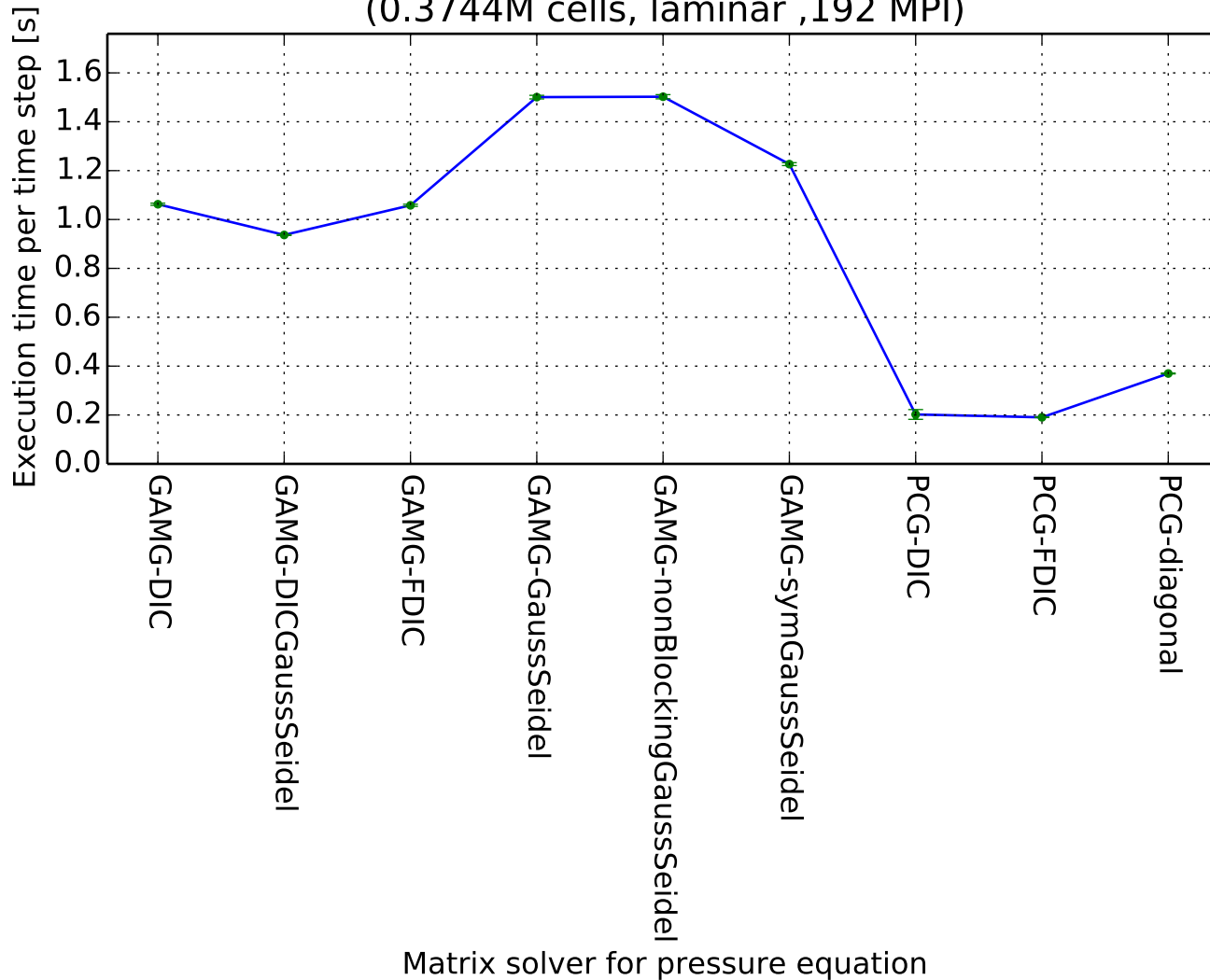
Execution time per time step
(0.3744M cells, laminar ,64 MPI)



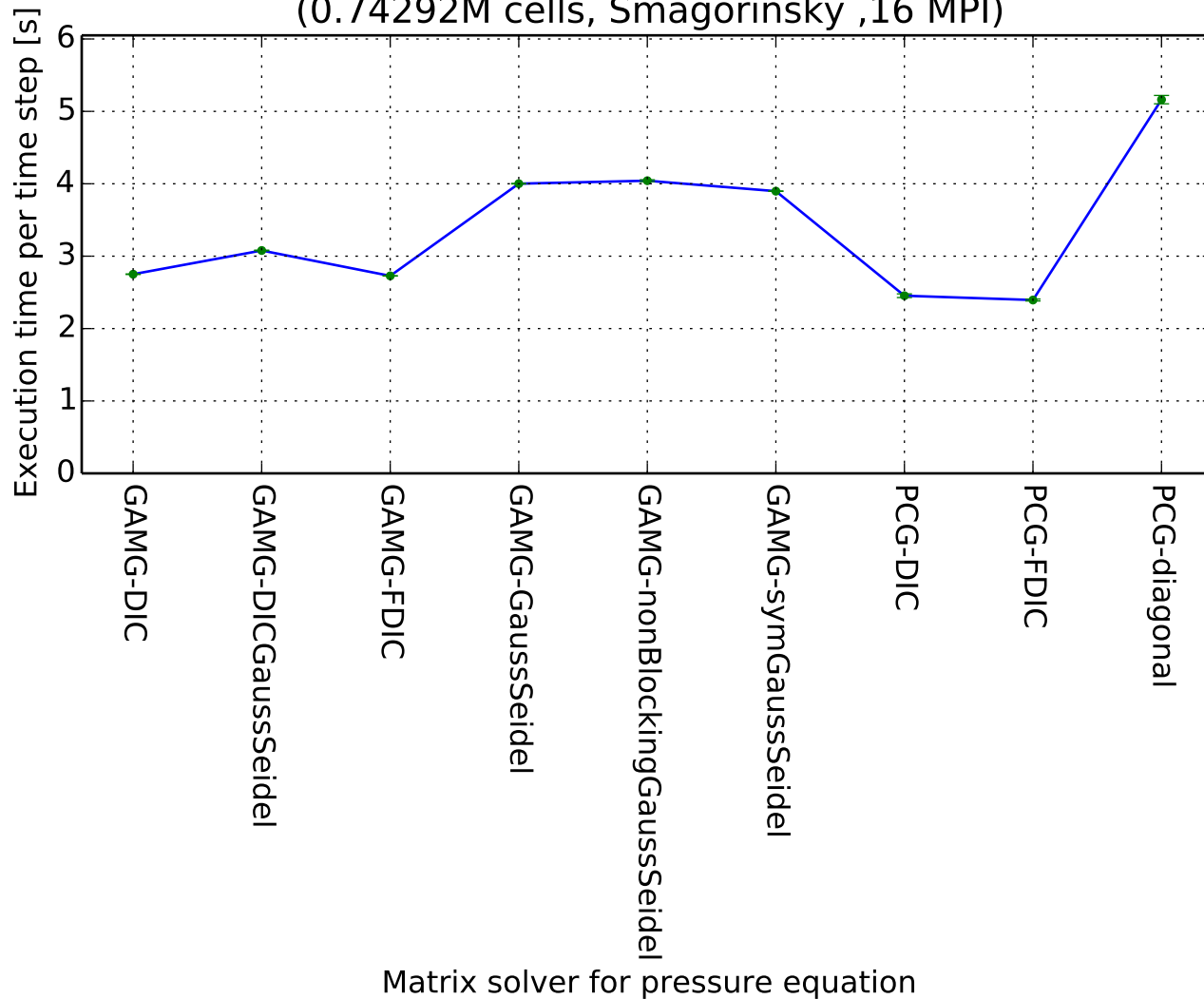
Execution time per time step
(0.3744M cells, laminar ,128 MPI)



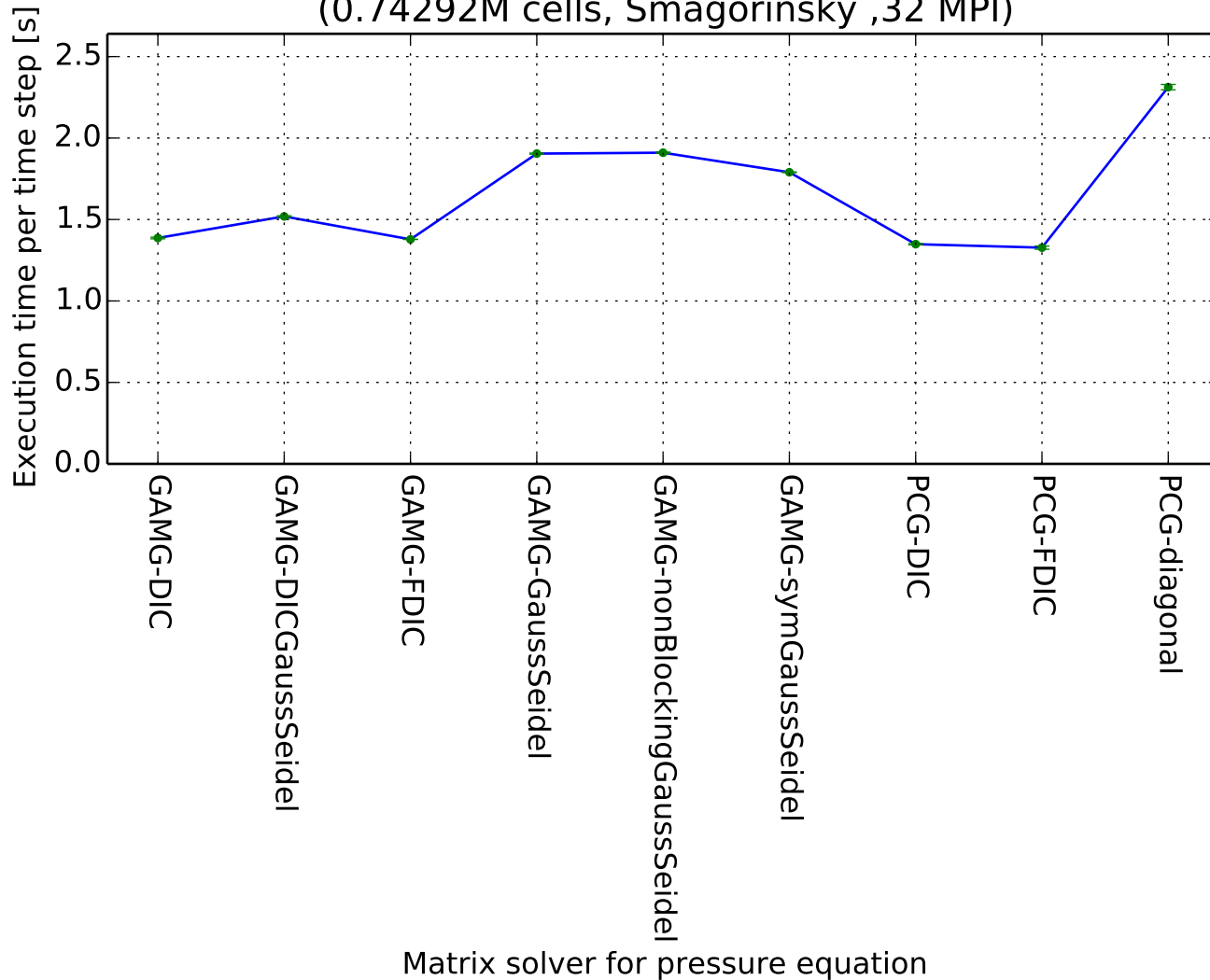
Execution time per time step
(0.3744M cells, laminar ,192 MPI)



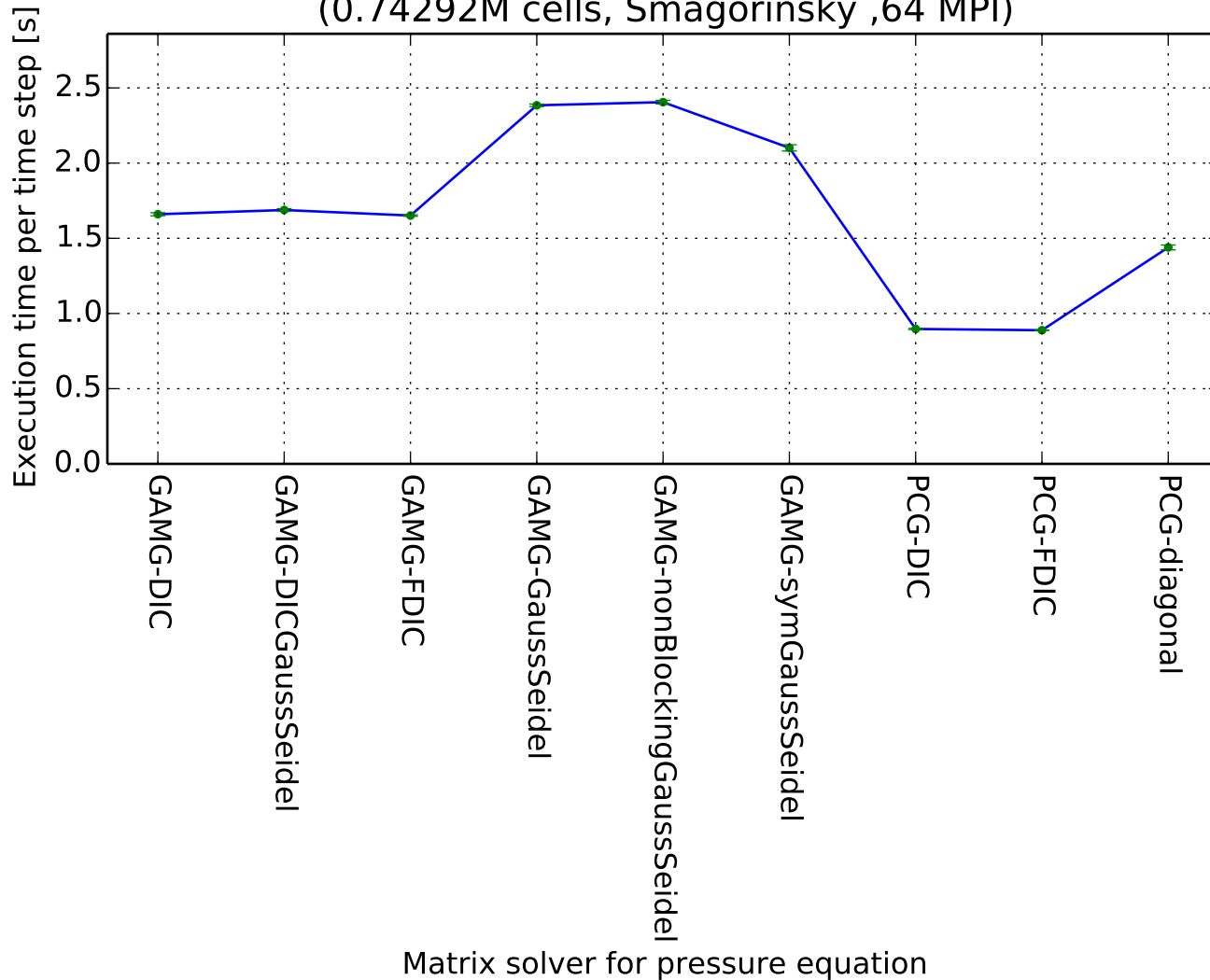
Execution time per time step
(0.74292M cells, Smagorinsky ,16 MPI)



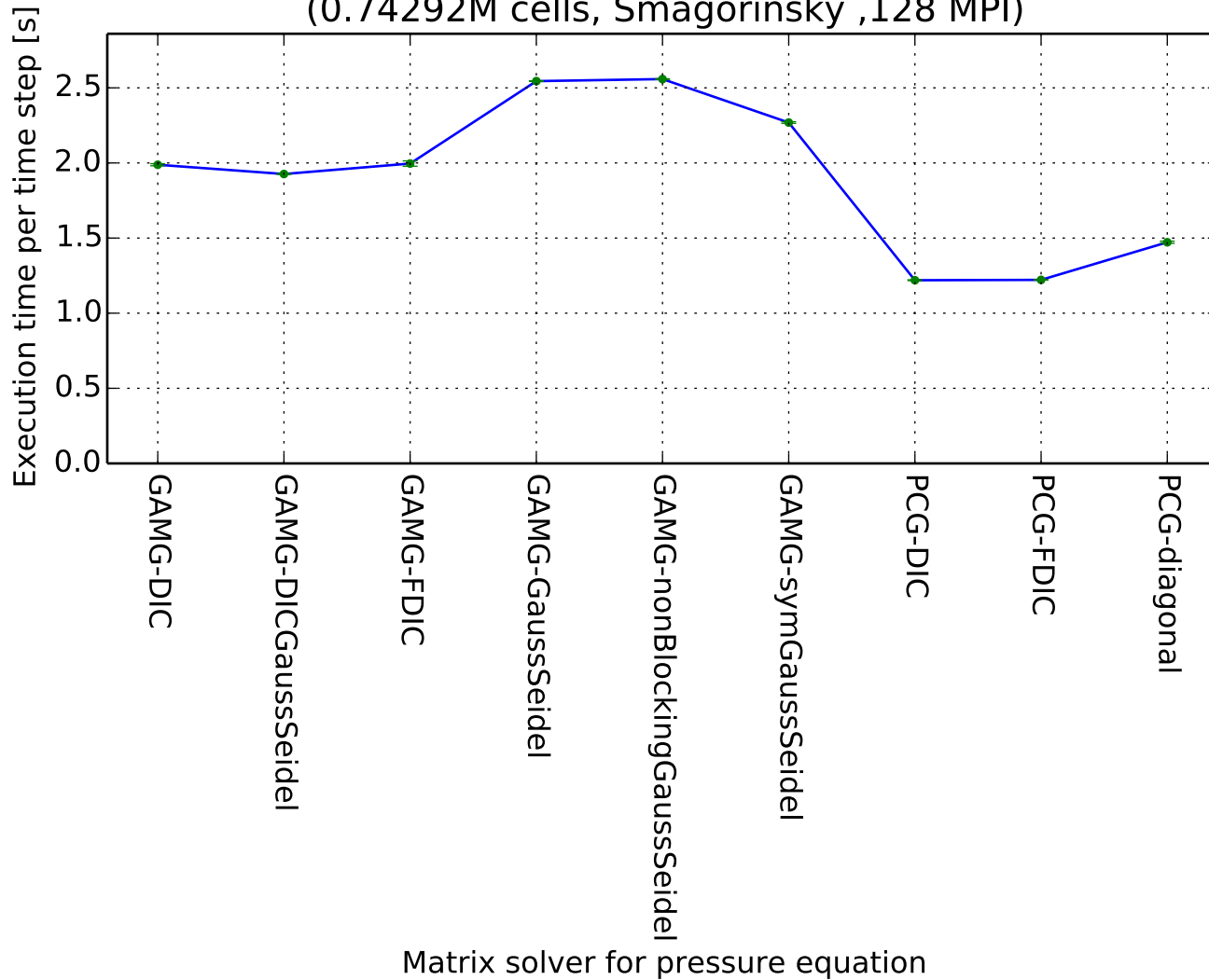
Execution time per time step
(0.74292M cells, Smagorinsky ,32 MPI)



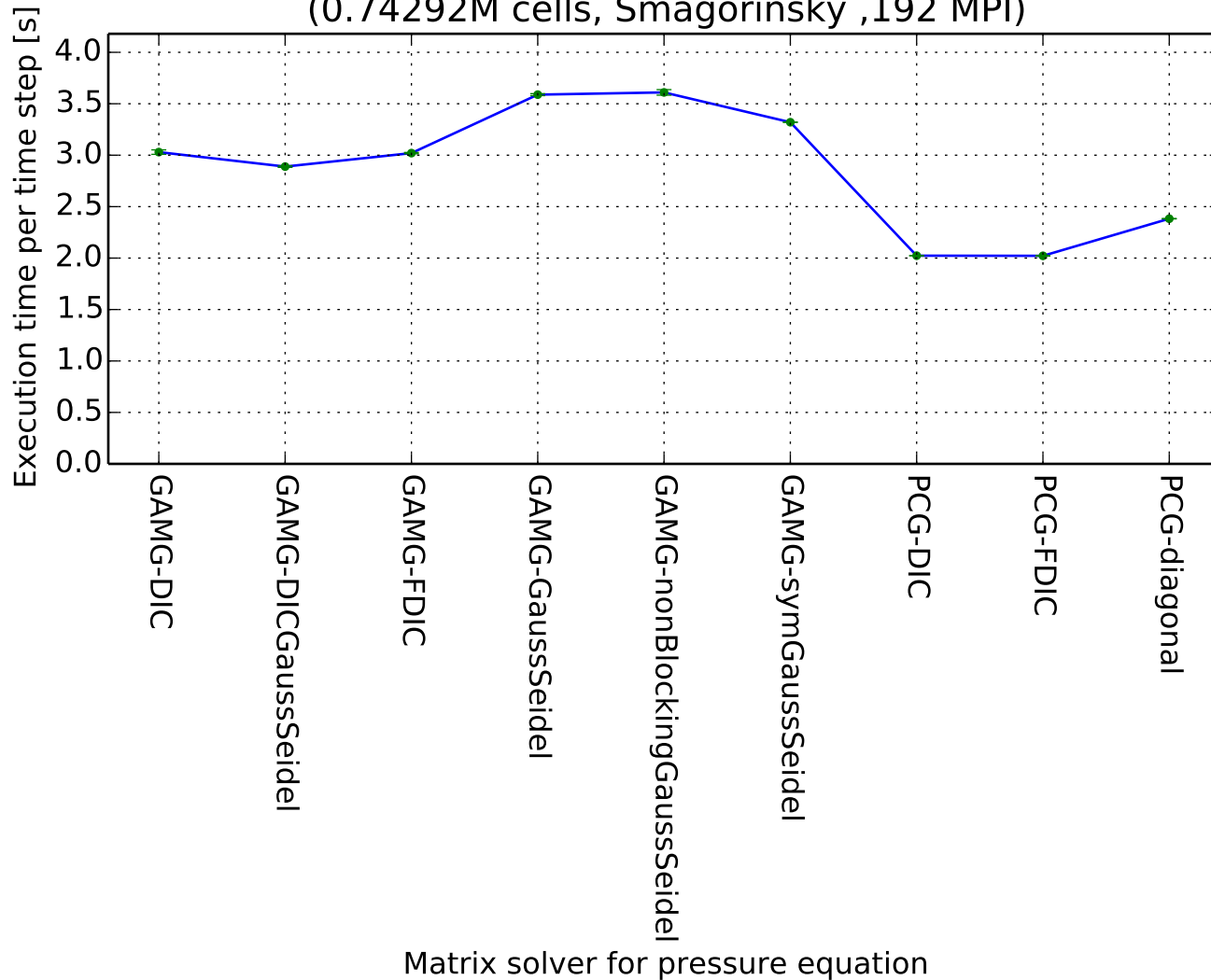
Execution time per time step
(0.74292M cells, Smagorinsky ,64 MPI)



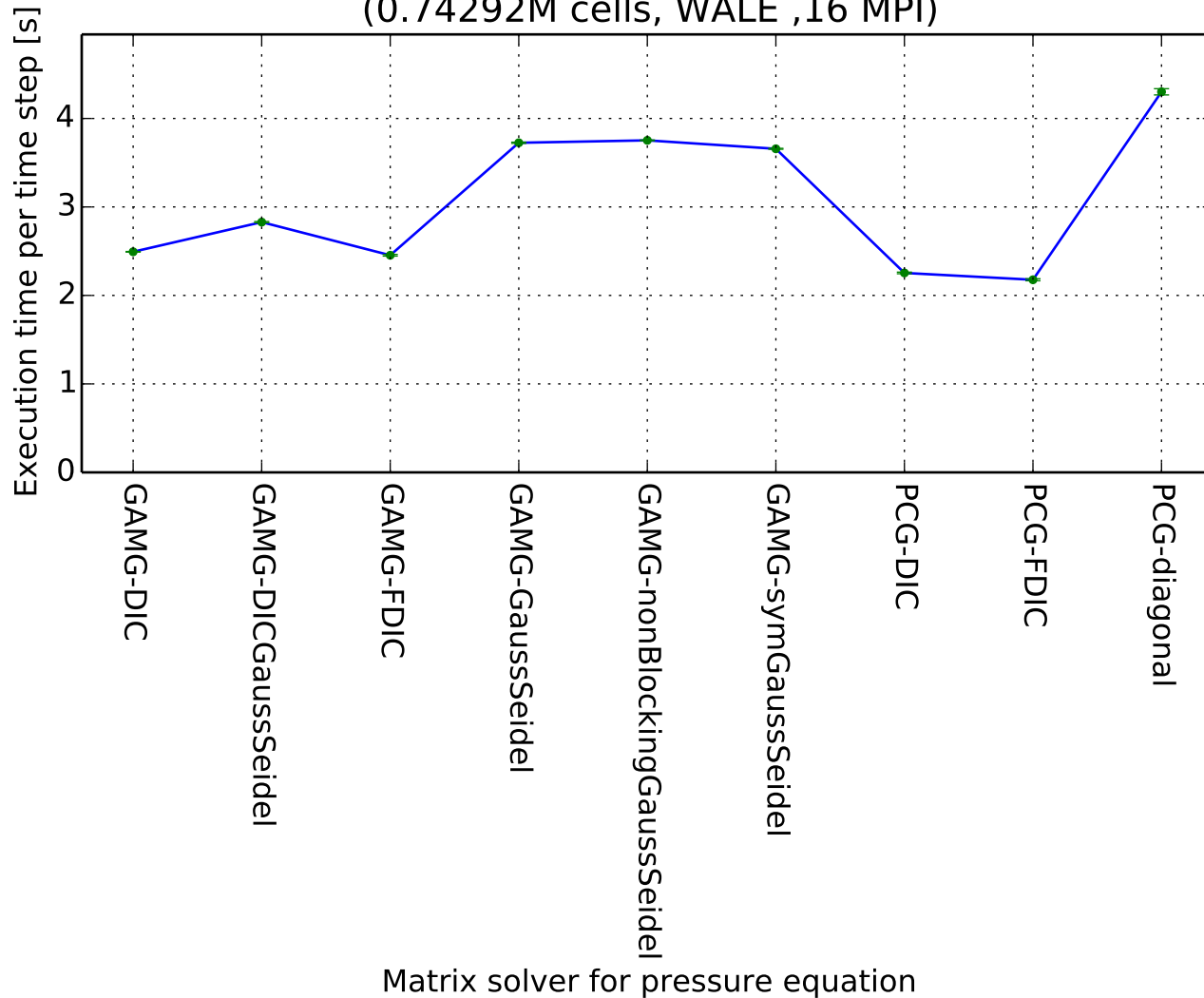
Execution time per time step
(0.74292M cells, Smagorinsky ,128 MPI)



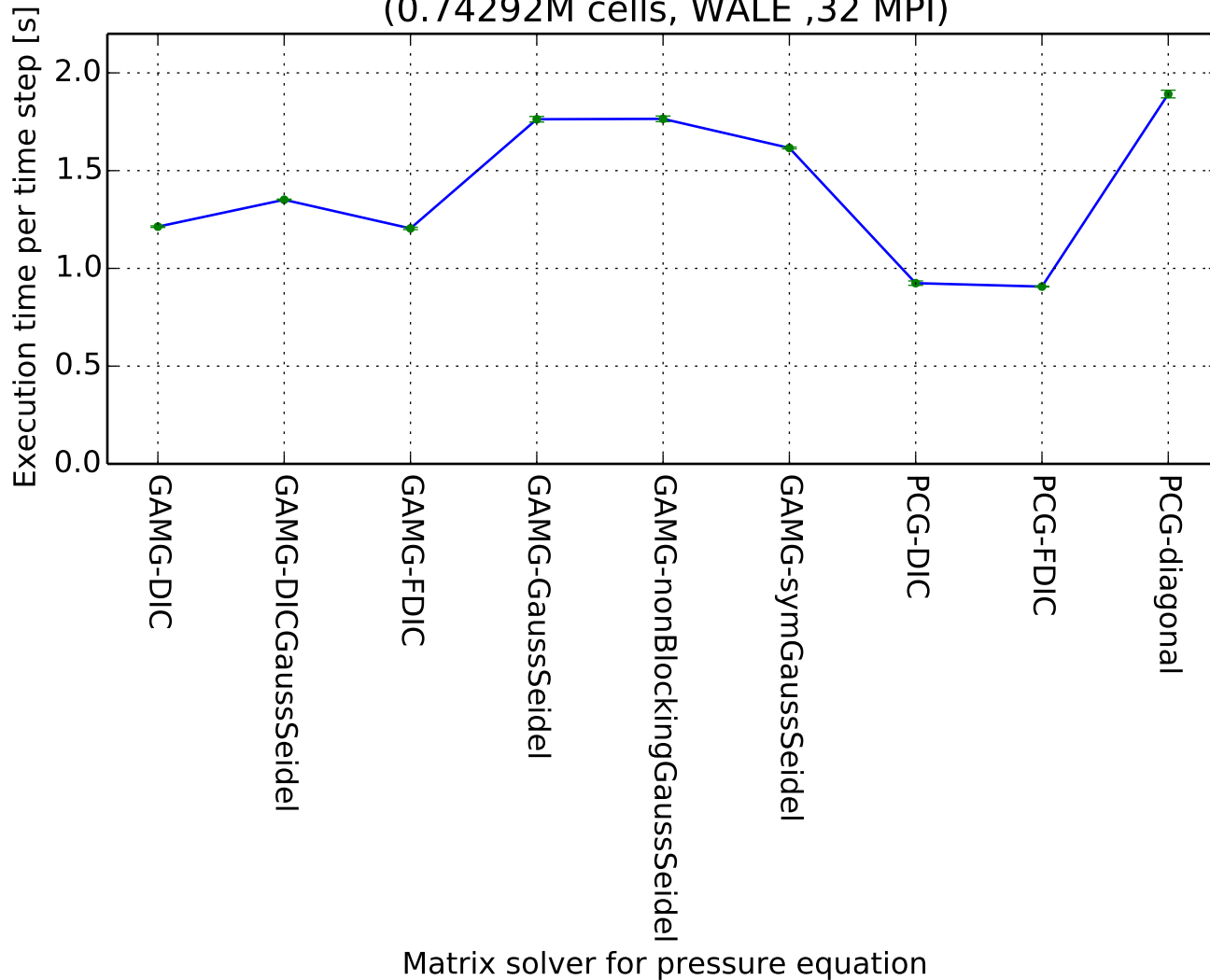
Execution time per time step
(0.74292M cells, Smagorinsky ,192 MPI)



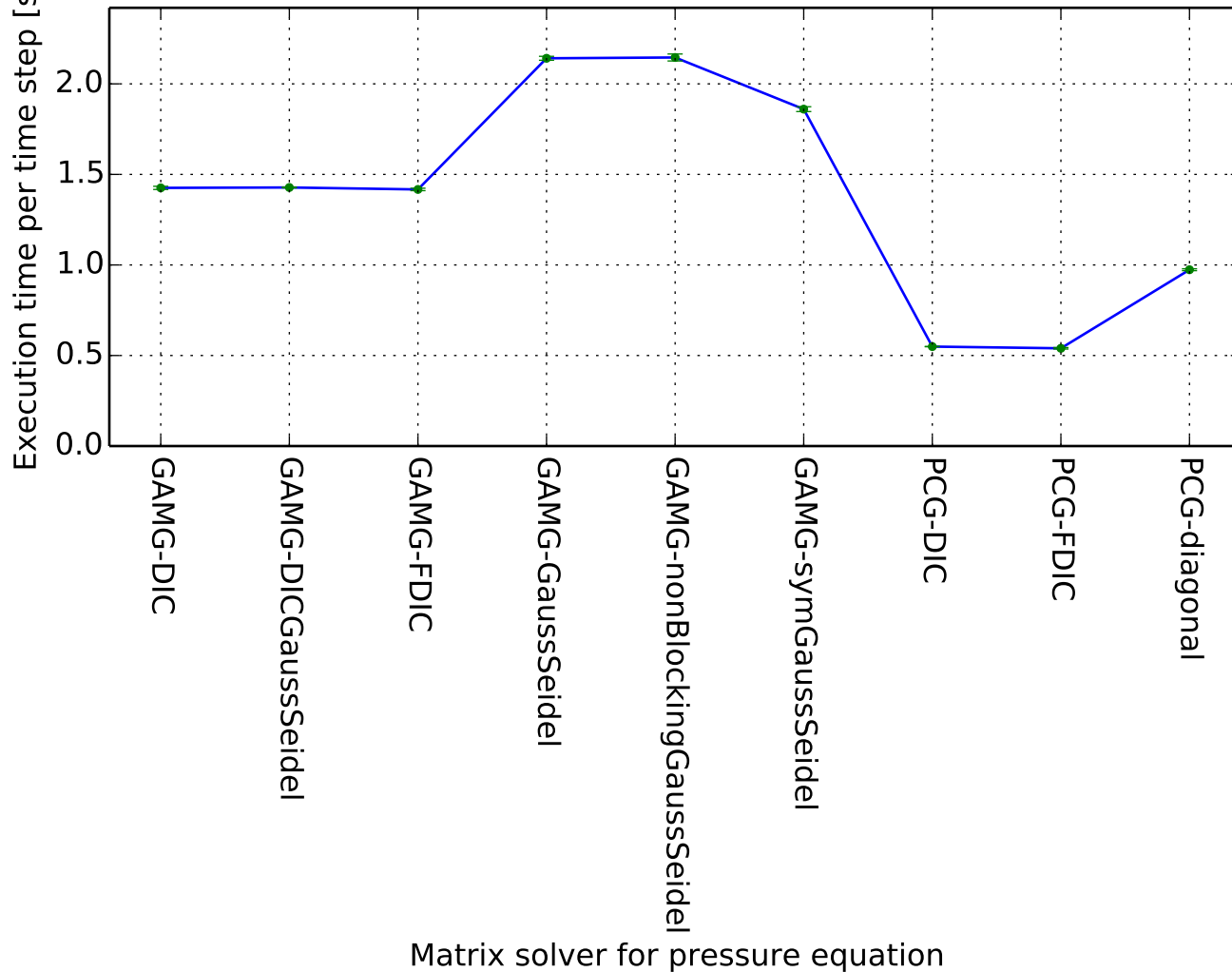
Execution time per time step
(0.74292M cells, WALE ,16 MPI)



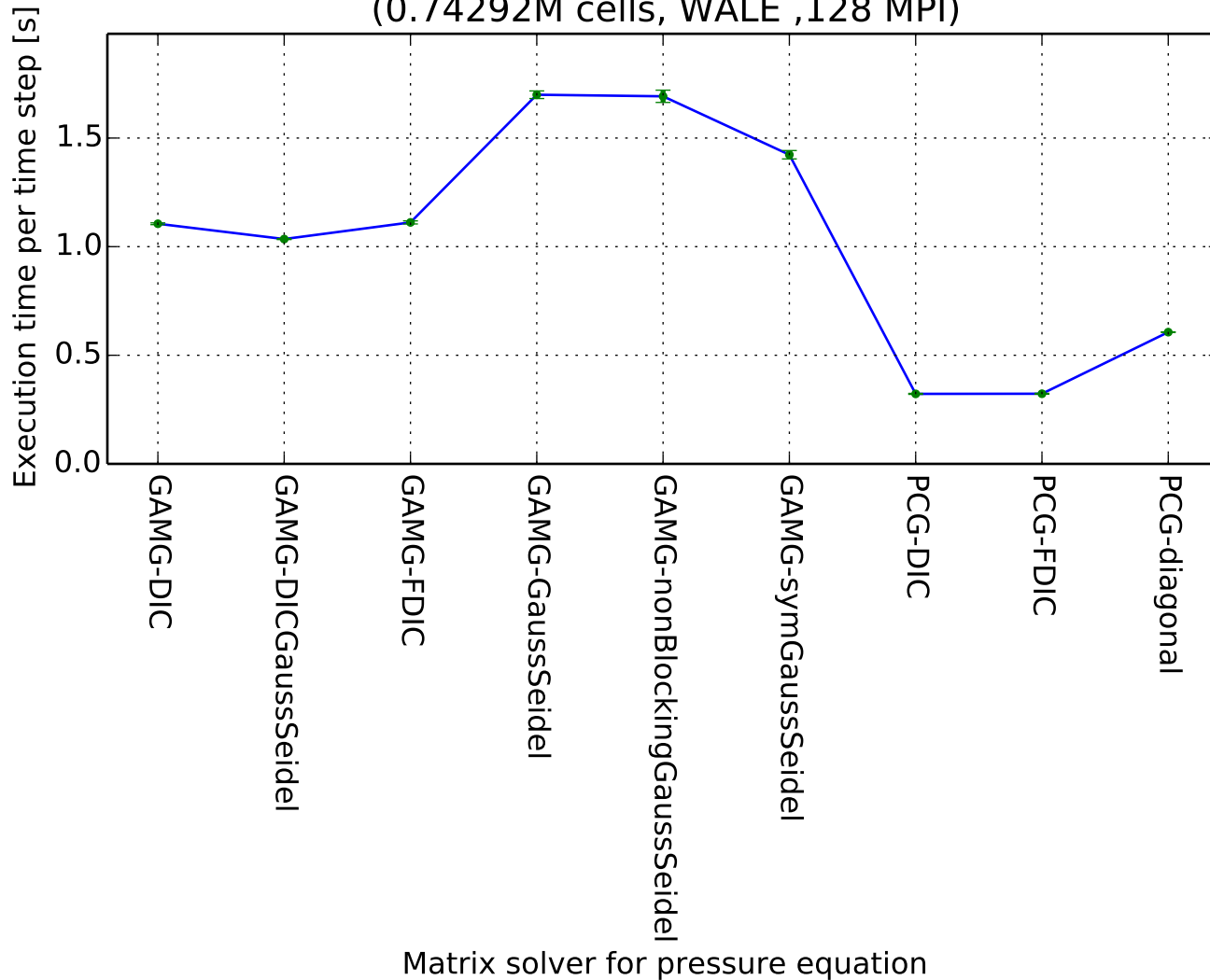
Execution time per time step
(0.74292M cells, WALE ,32 MPI)



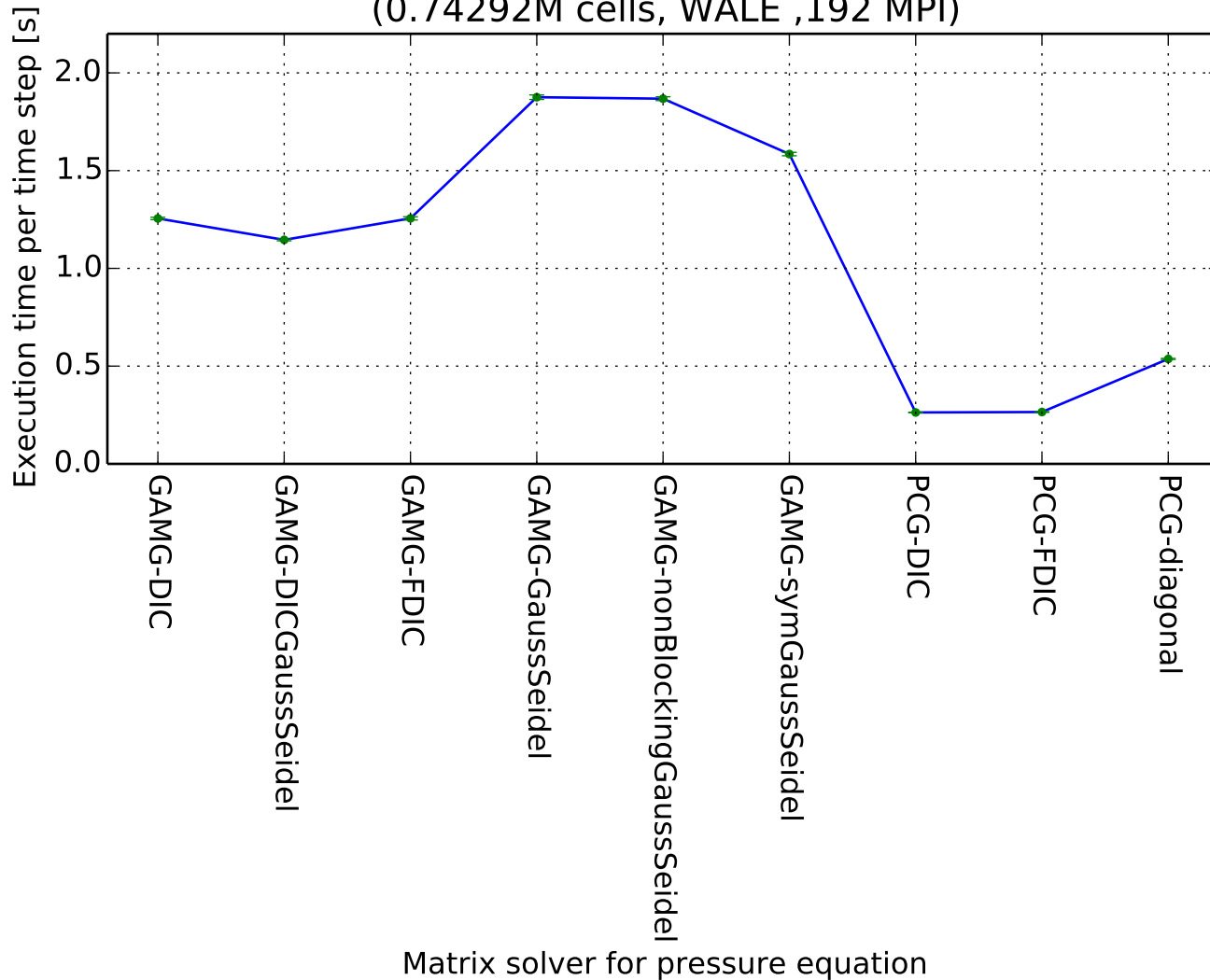
Execution time per time step
(0.74292M cells, WALE ,64 MPI)



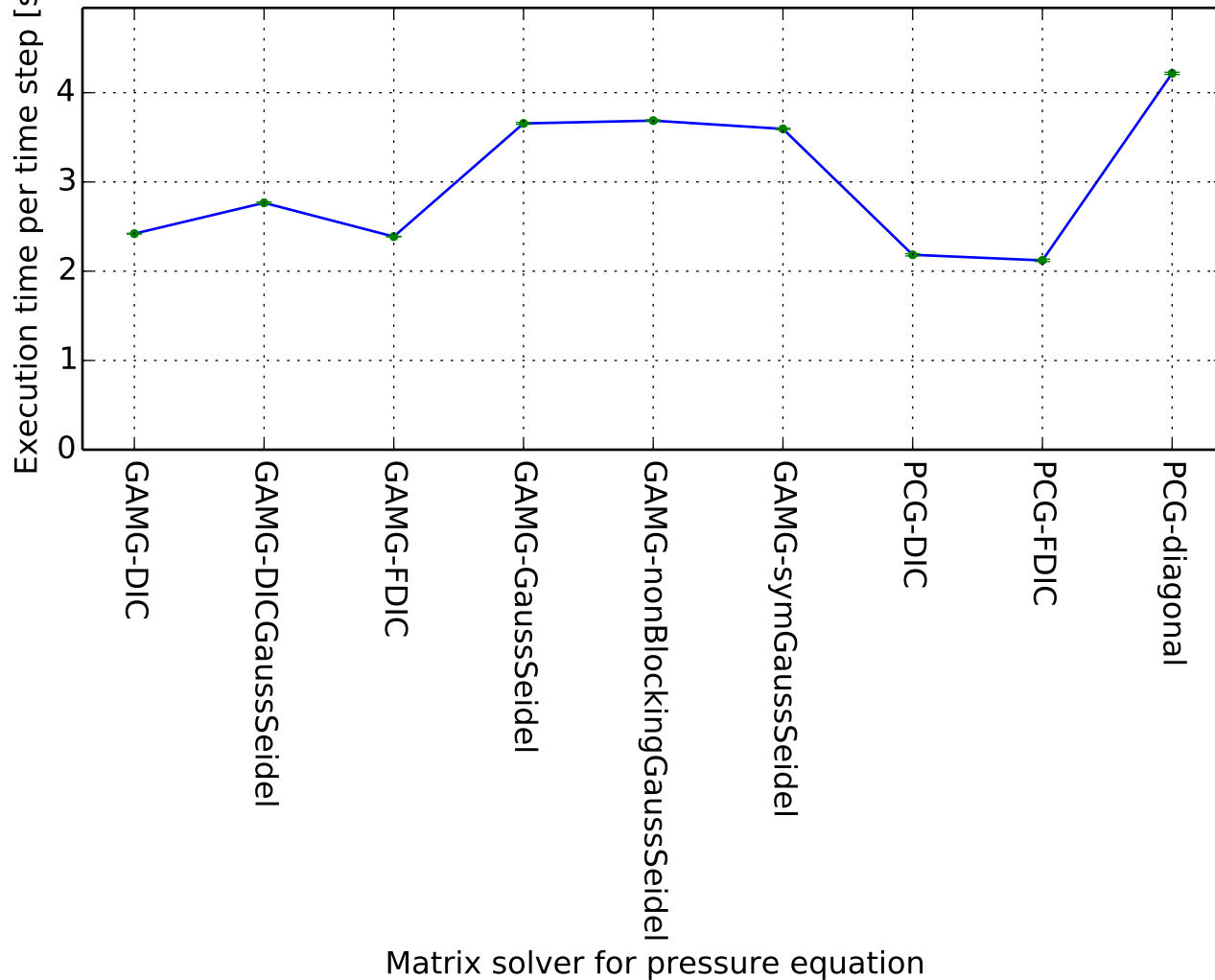
Execution time per time step
(0.74292M cells, WALE ,128 MPI)



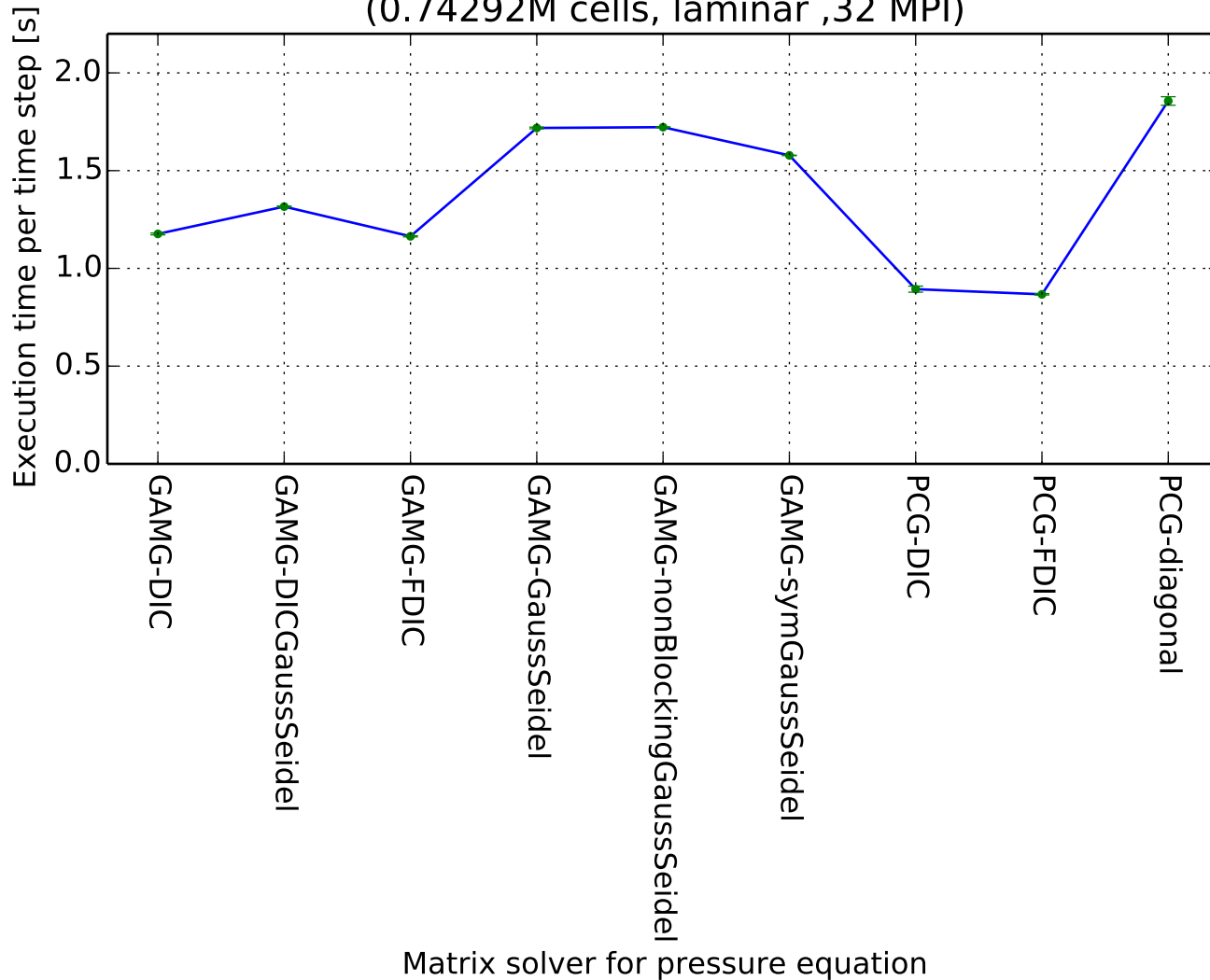
Execution time per time step
(0.74292M cells, WALE ,192 MPI)



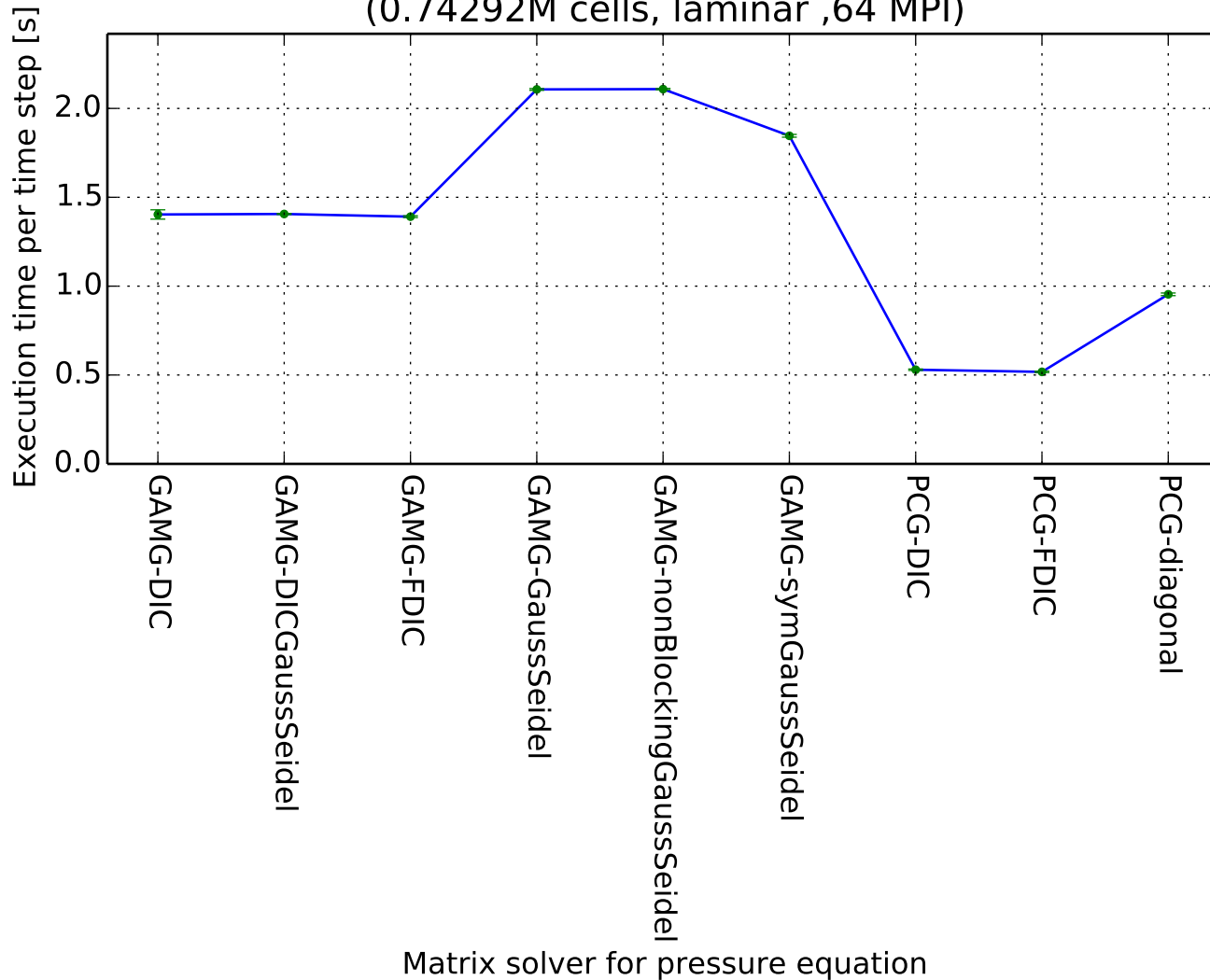
Execution time per time step
(0.74292M cells, laminar ,16 MPI)



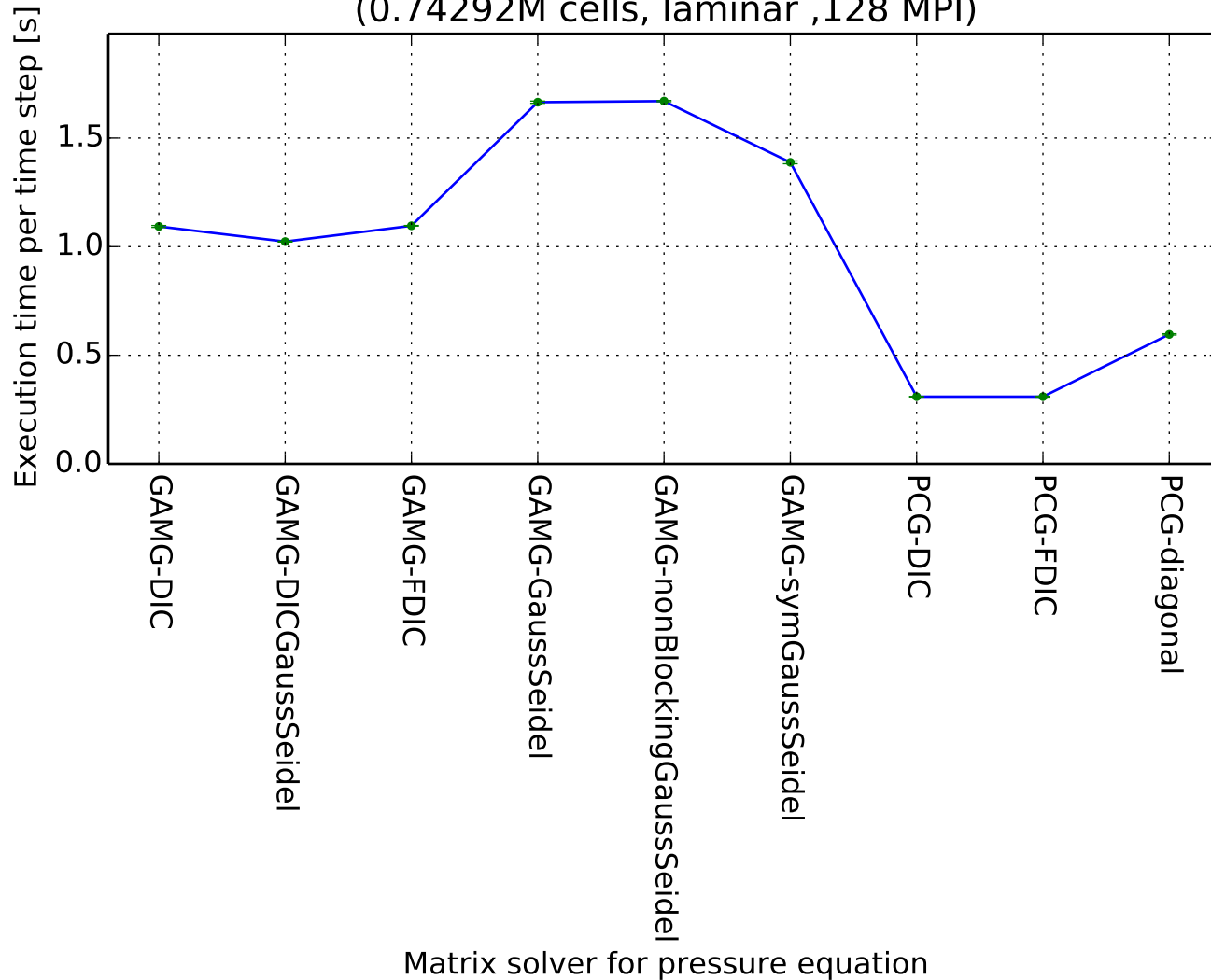
Execution time per time step
(0.74292M cells, laminar ,32 MPI)



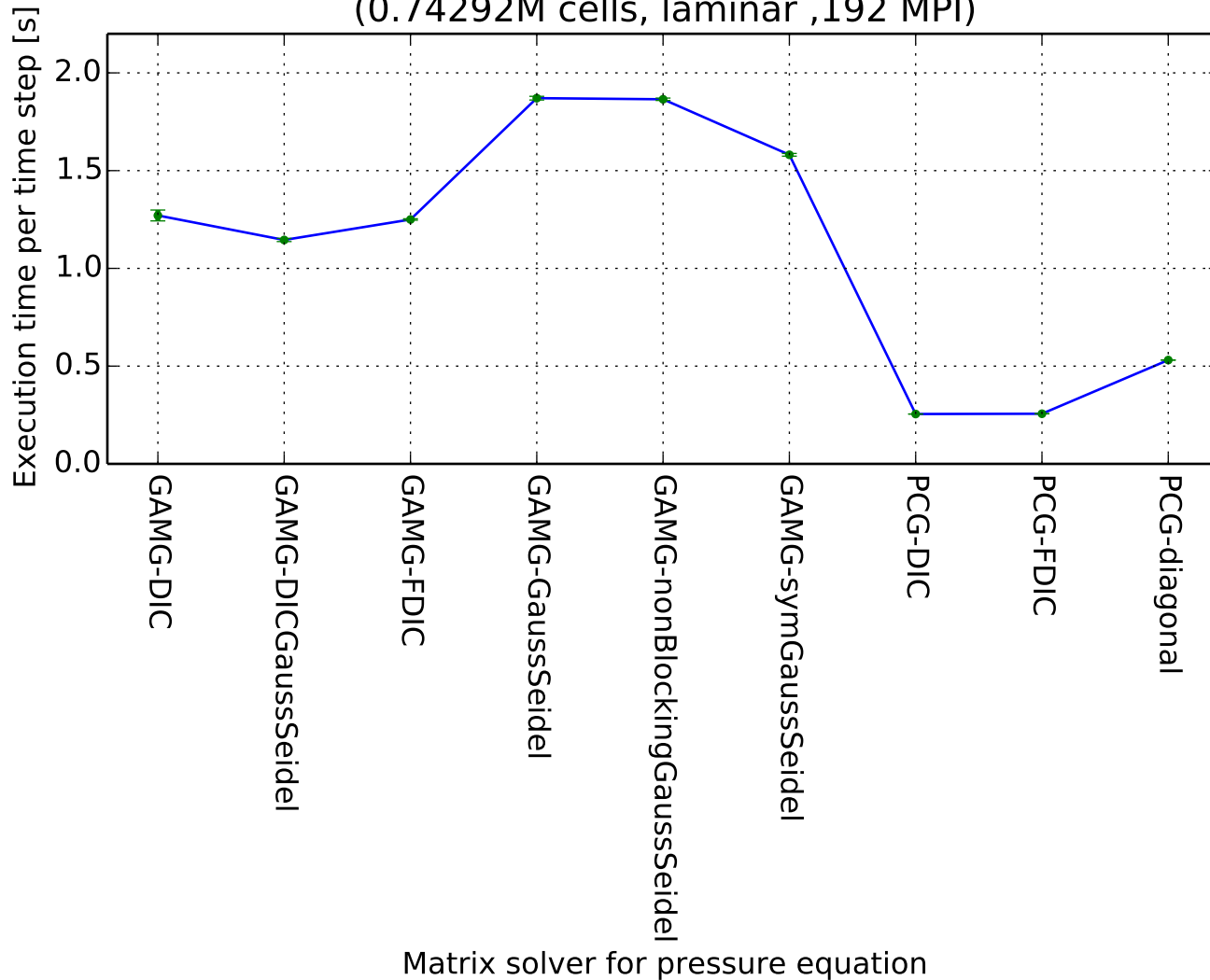
Execution time per time step
(0.74292M cells, laminar ,64 MPI)



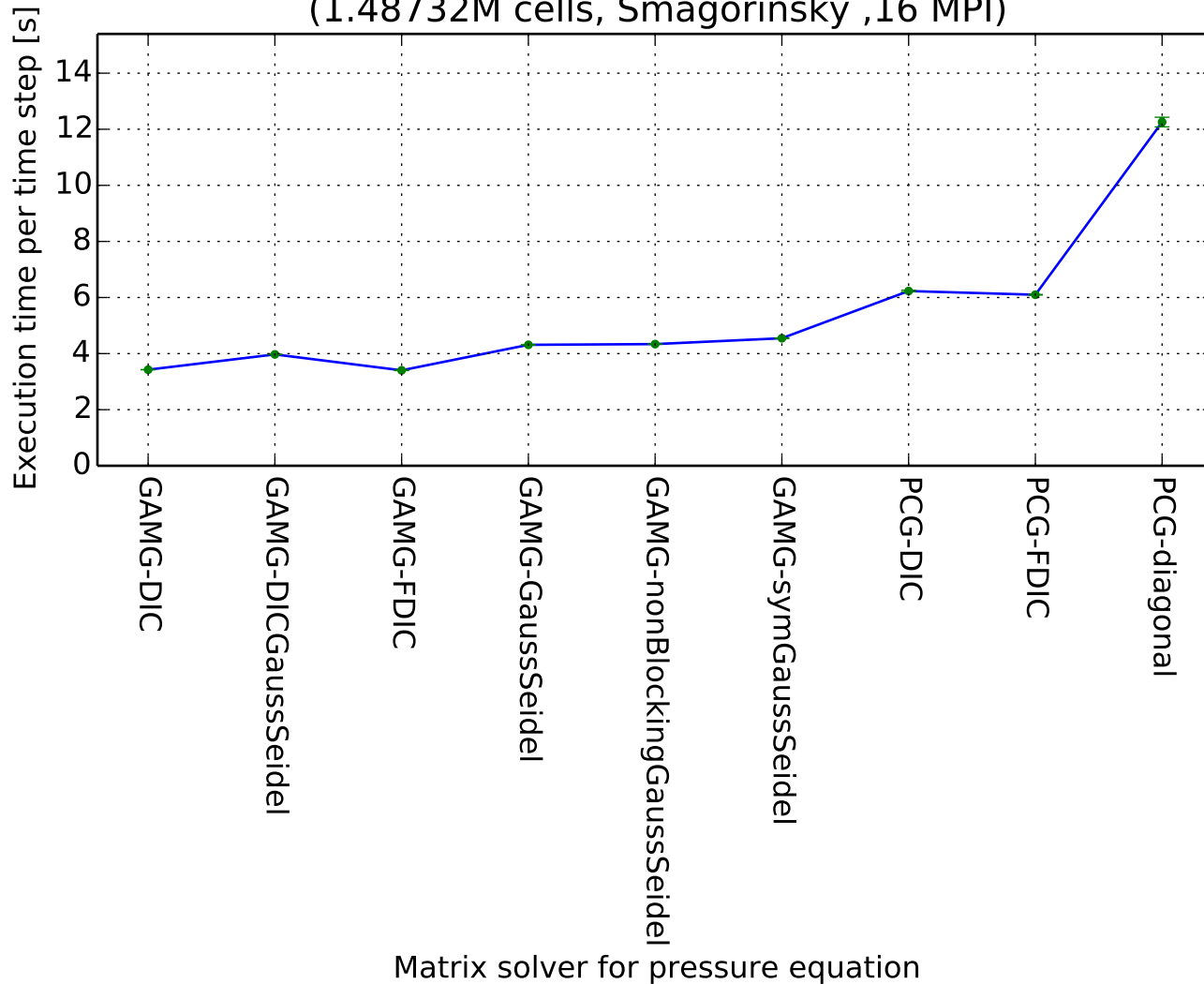
Execution time per time step
(0.74292M cells, laminar ,128 MPI)



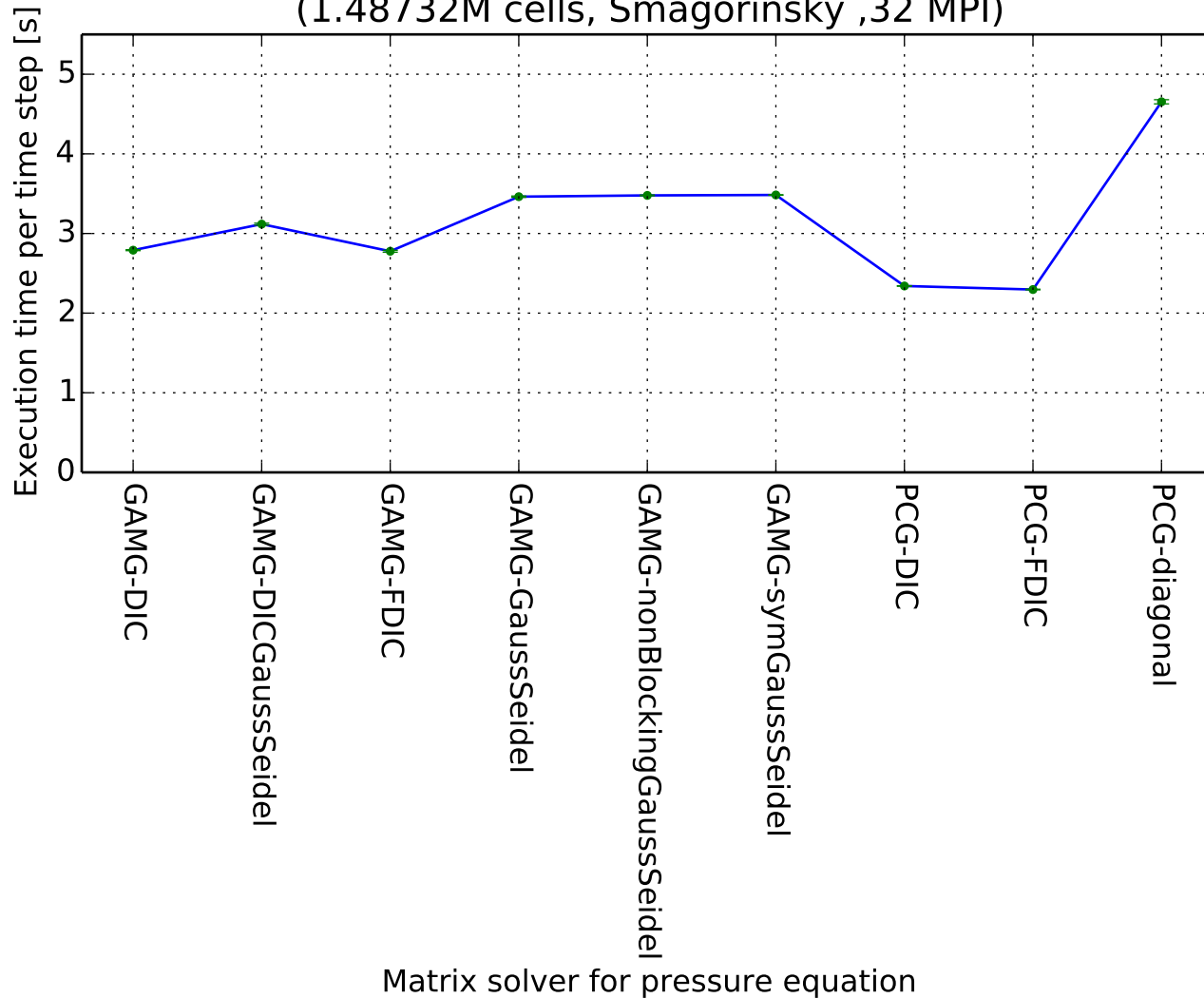
Execution time per time step
(0.74292M cells, laminar ,192 MPI)



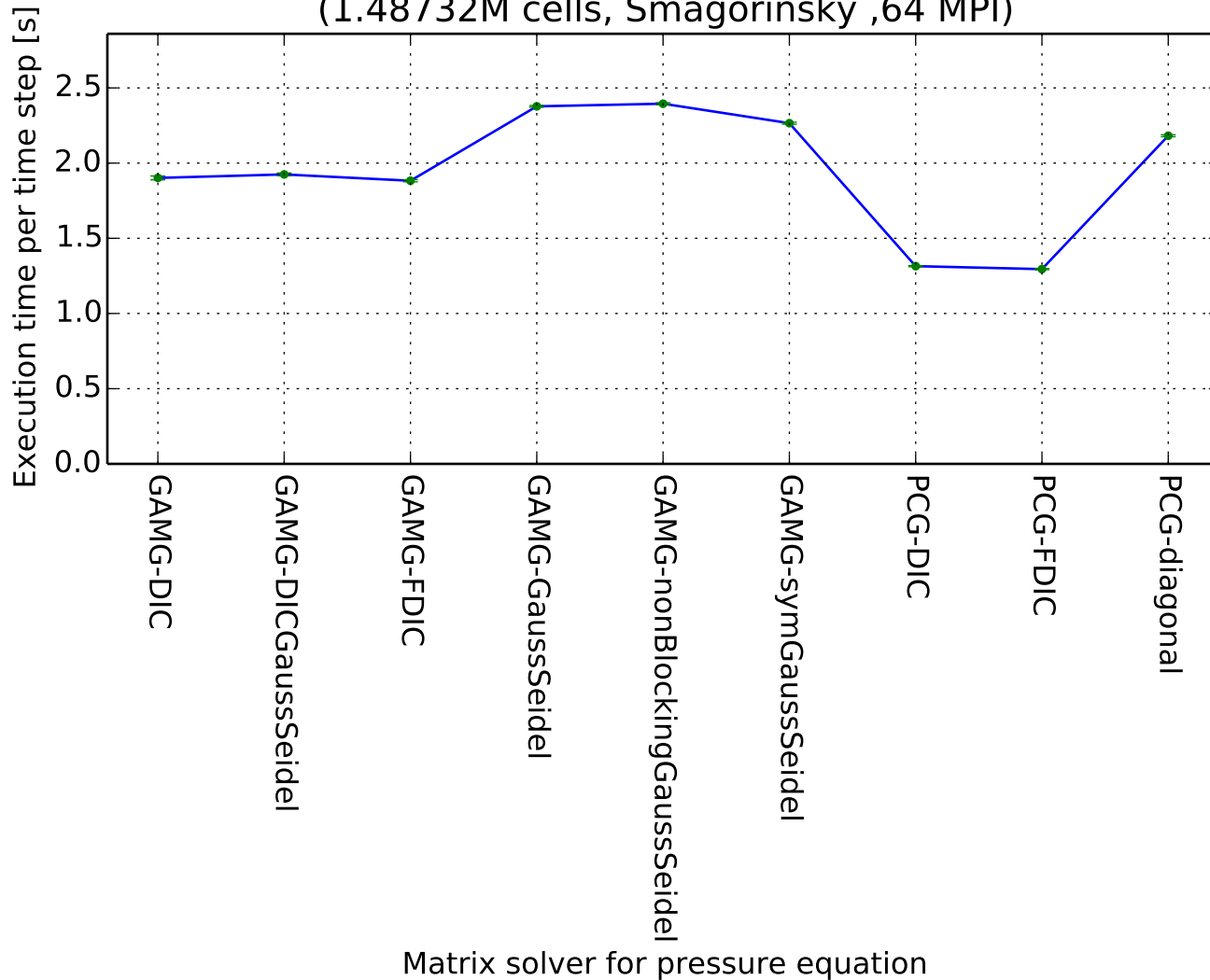
Execution time per time step
(1.48732M cells, Smagorinsky ,16 MPI)



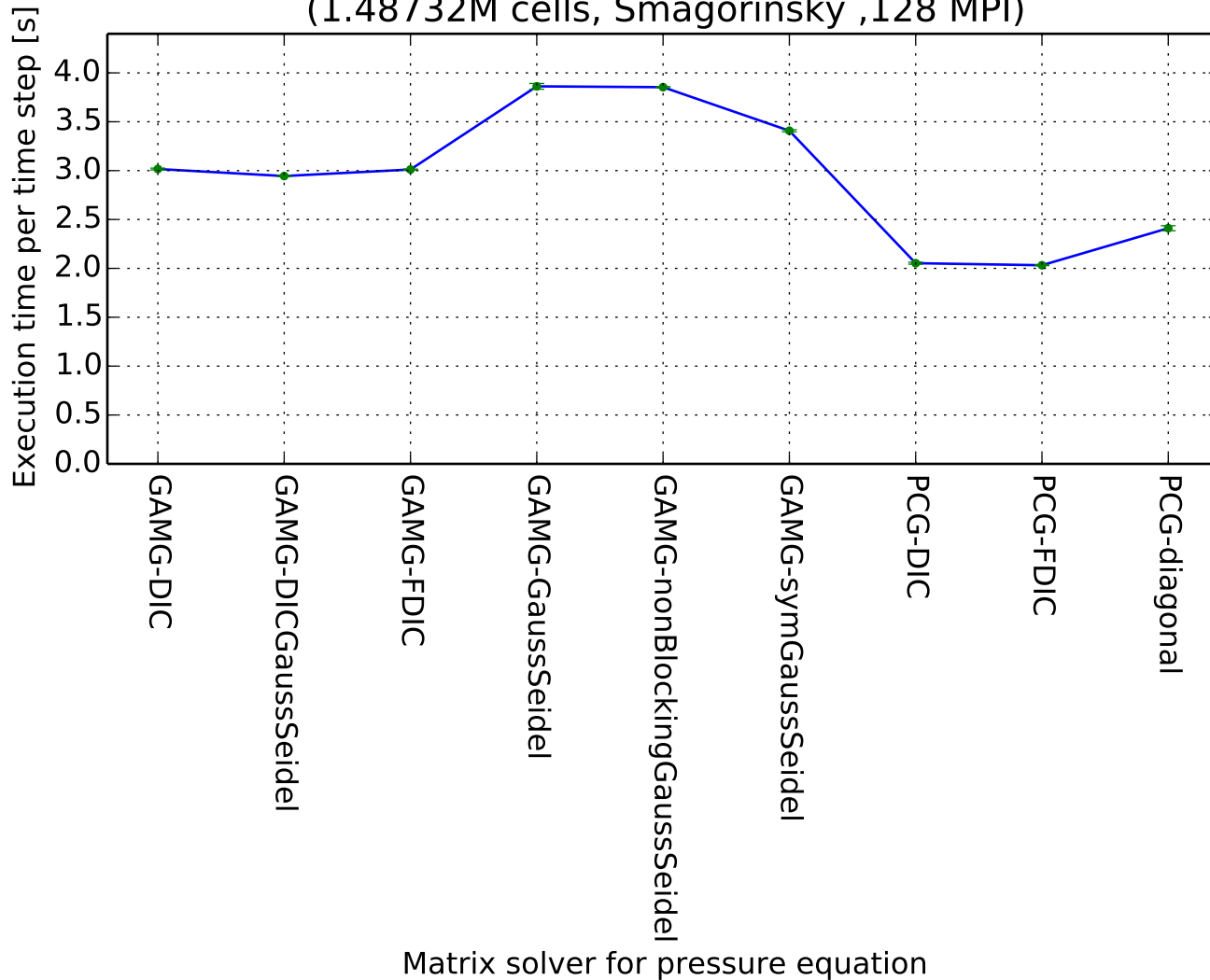
Execution time per time step
(1.48732M cells, Smagorinsky ,32 MPI)



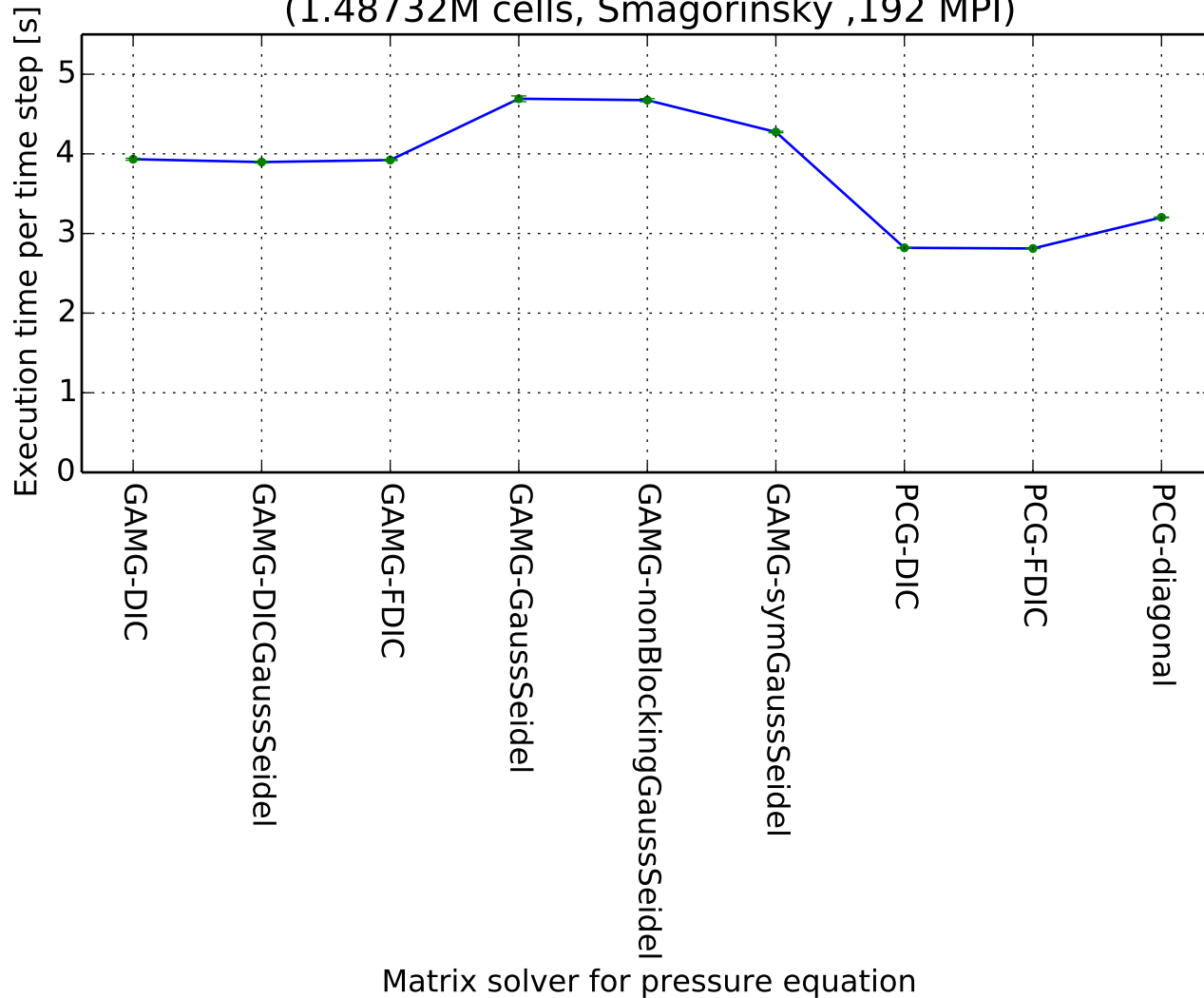
Execution time per time step
(1.48732M cells, Smagorinsky ,64 MPI)



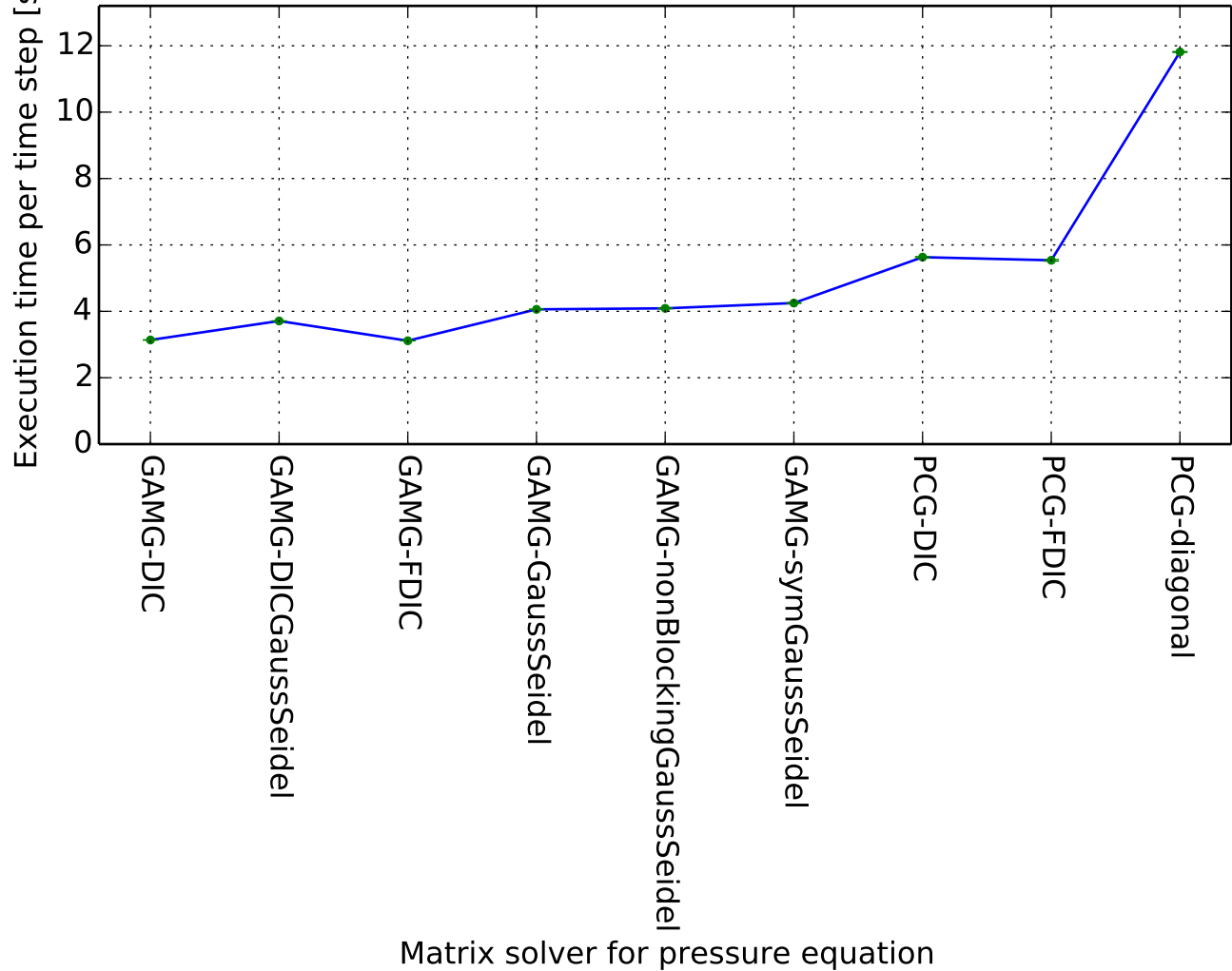
Execution time per time step
(1.48732M cells, Smagorinsky ,128 MPI)



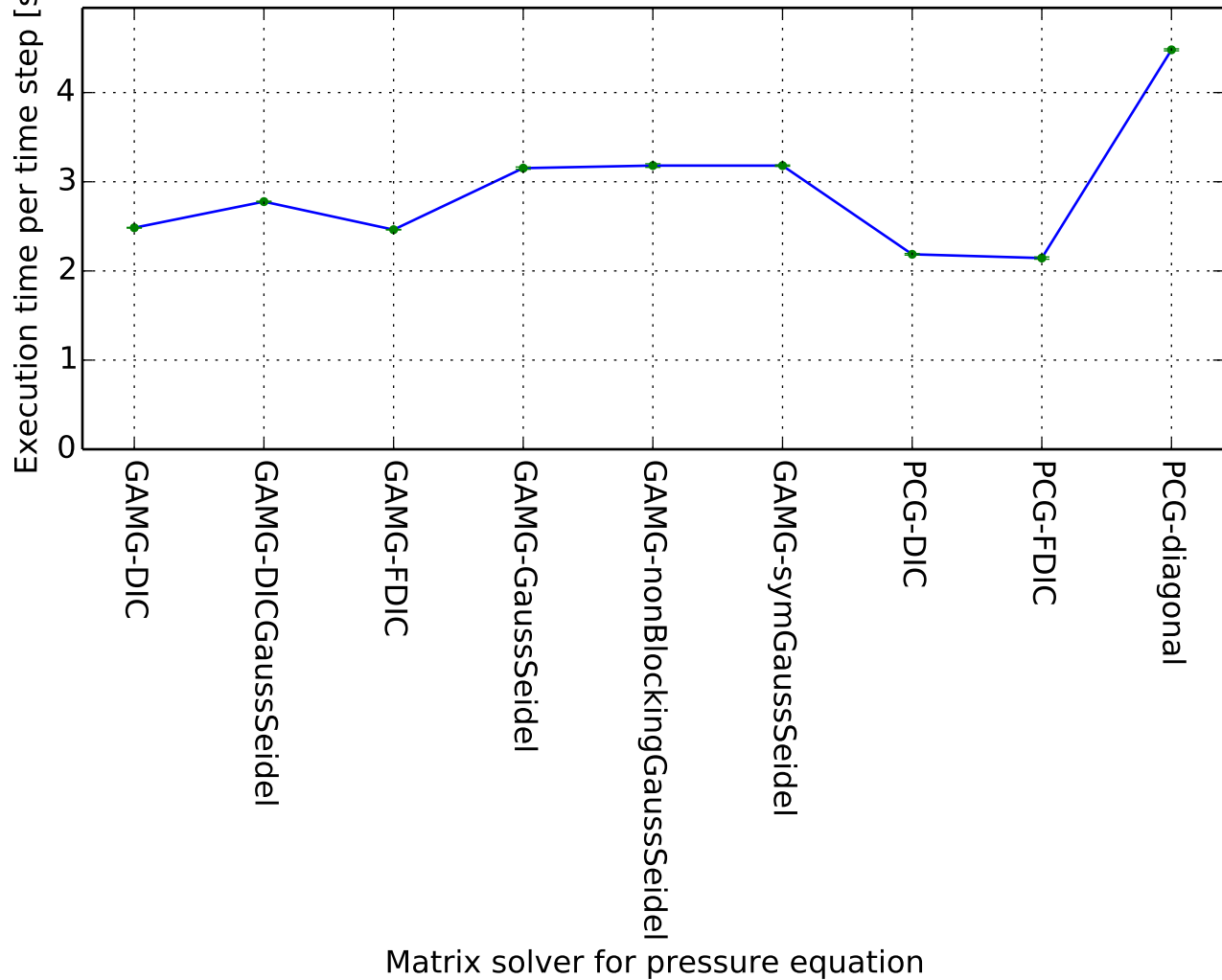
Execution time per time step
(1.48732M cells, Smagorinsky ,192 MPI)



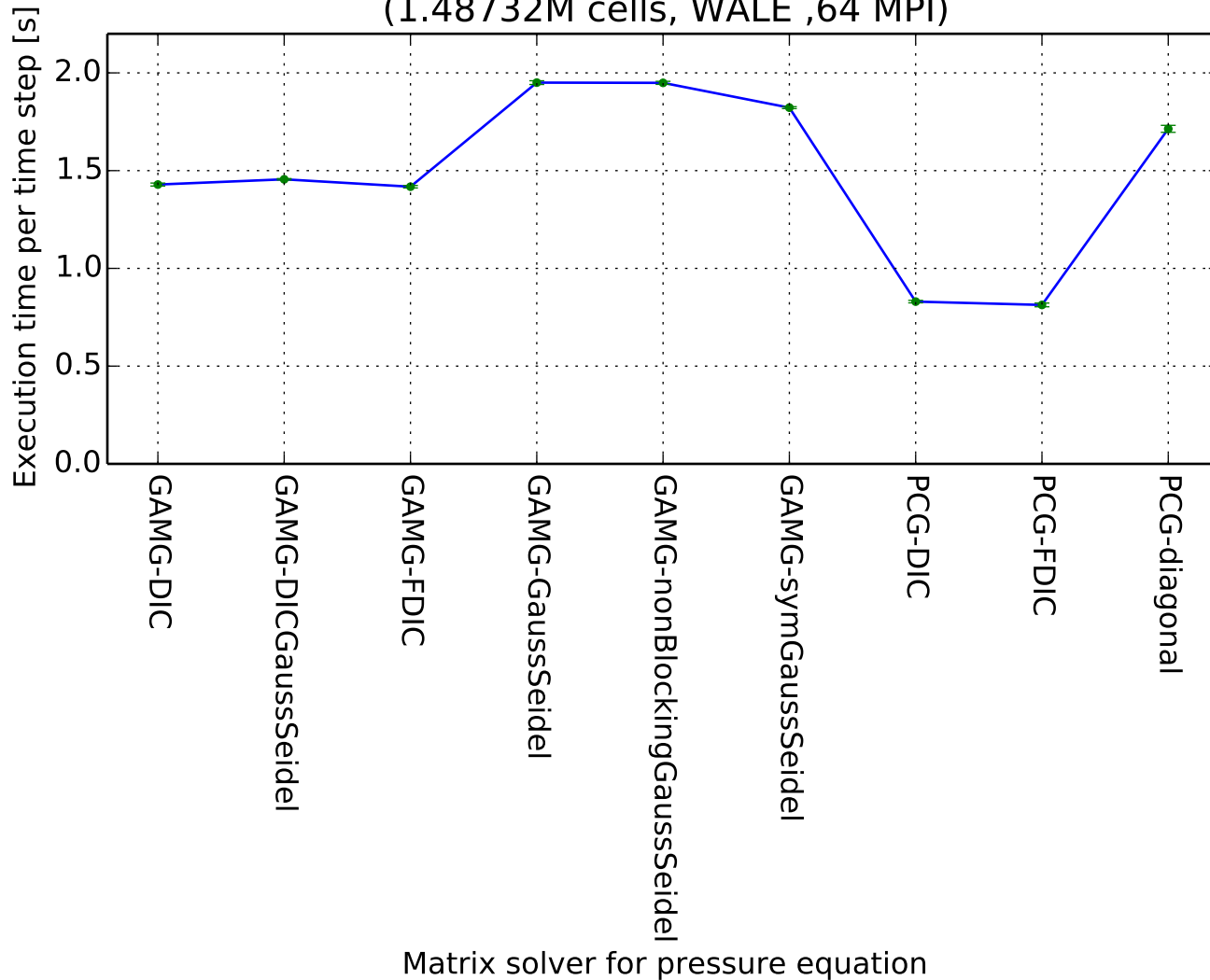
Execution time per time step
(1.48732M cells, WALE ,16 MPI)



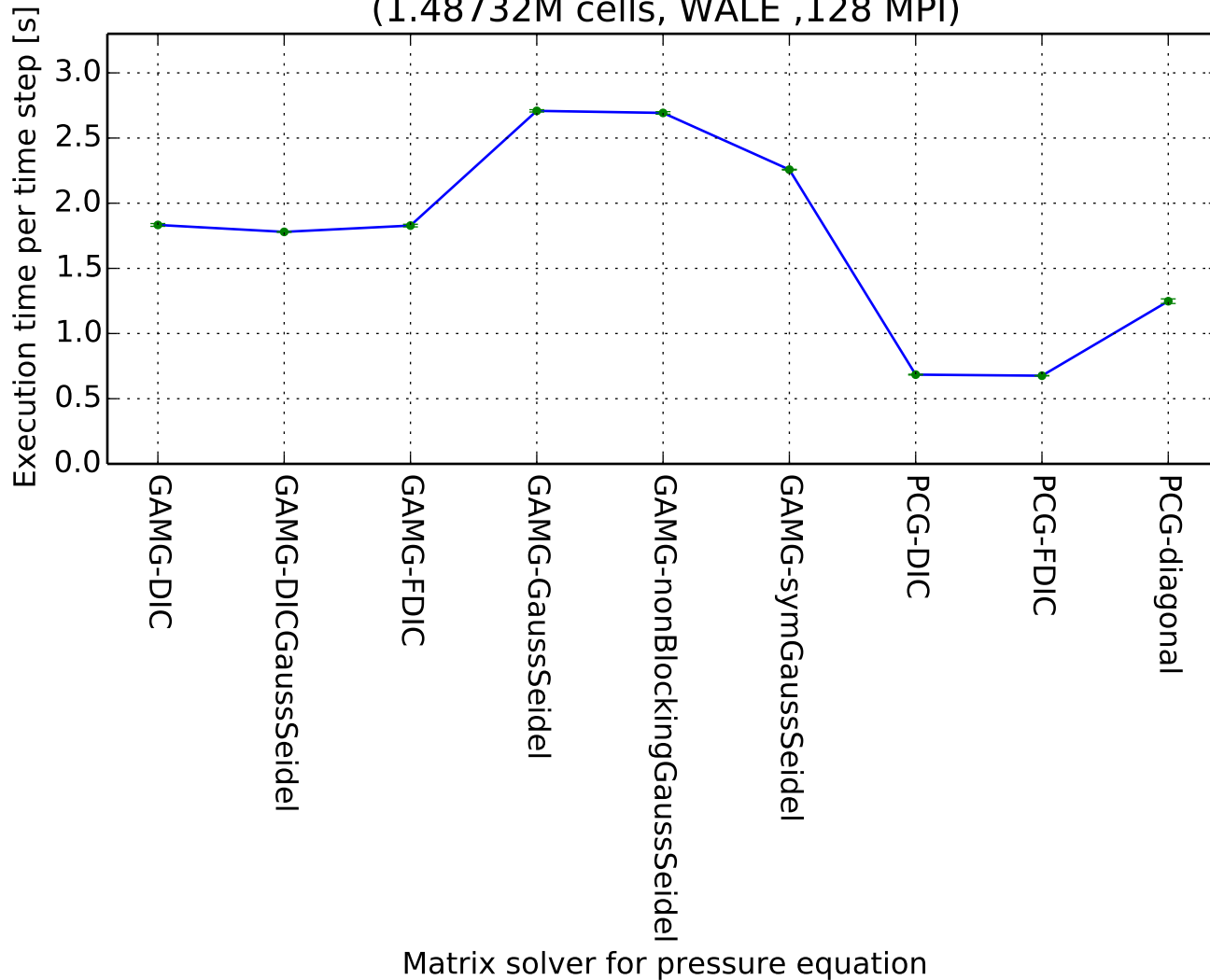
Execution time per time step
(1.48732M cells, WALE ,32 MPI)



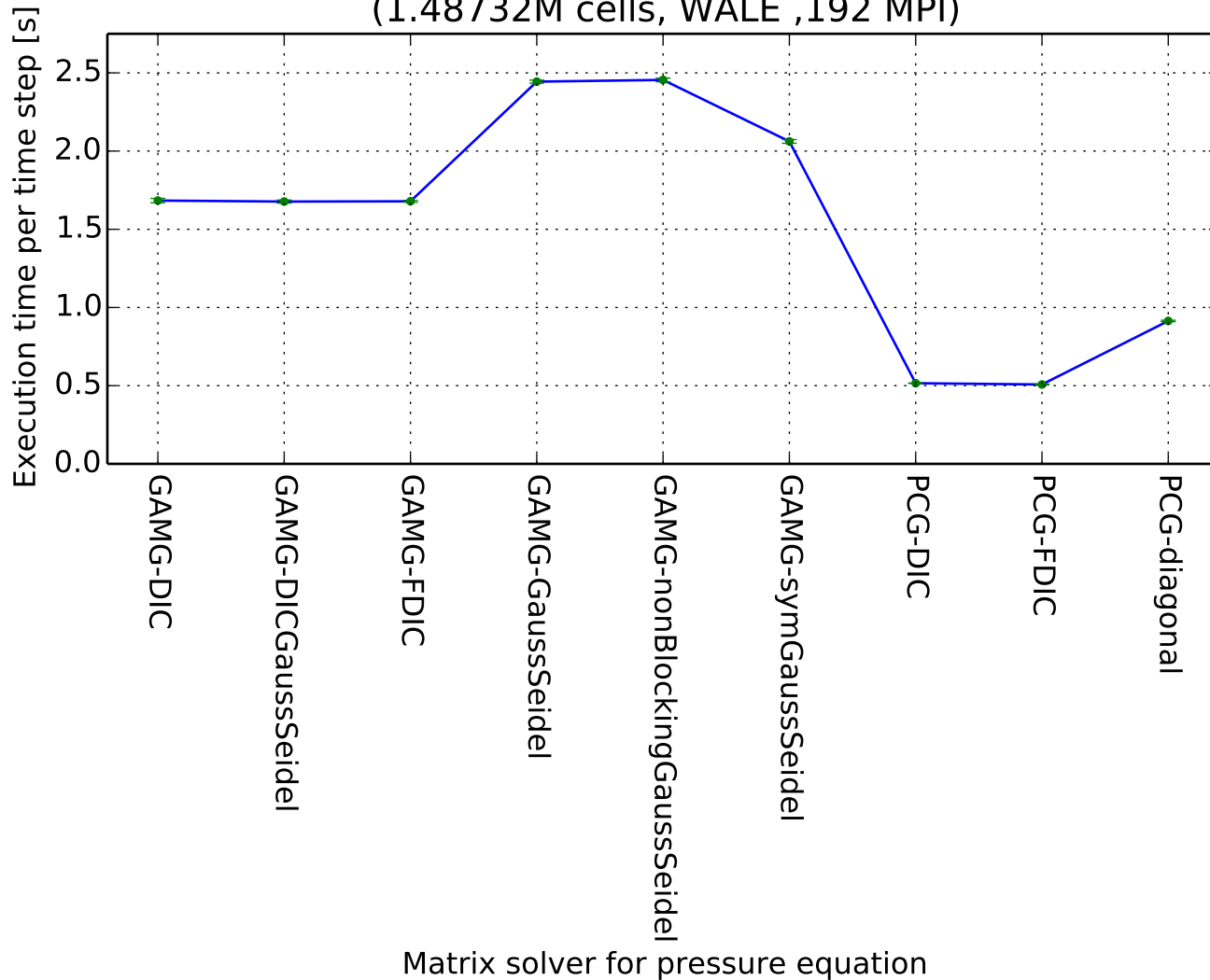
Execution time per time step
(1.48732M cells, WALE ,64 MPI)



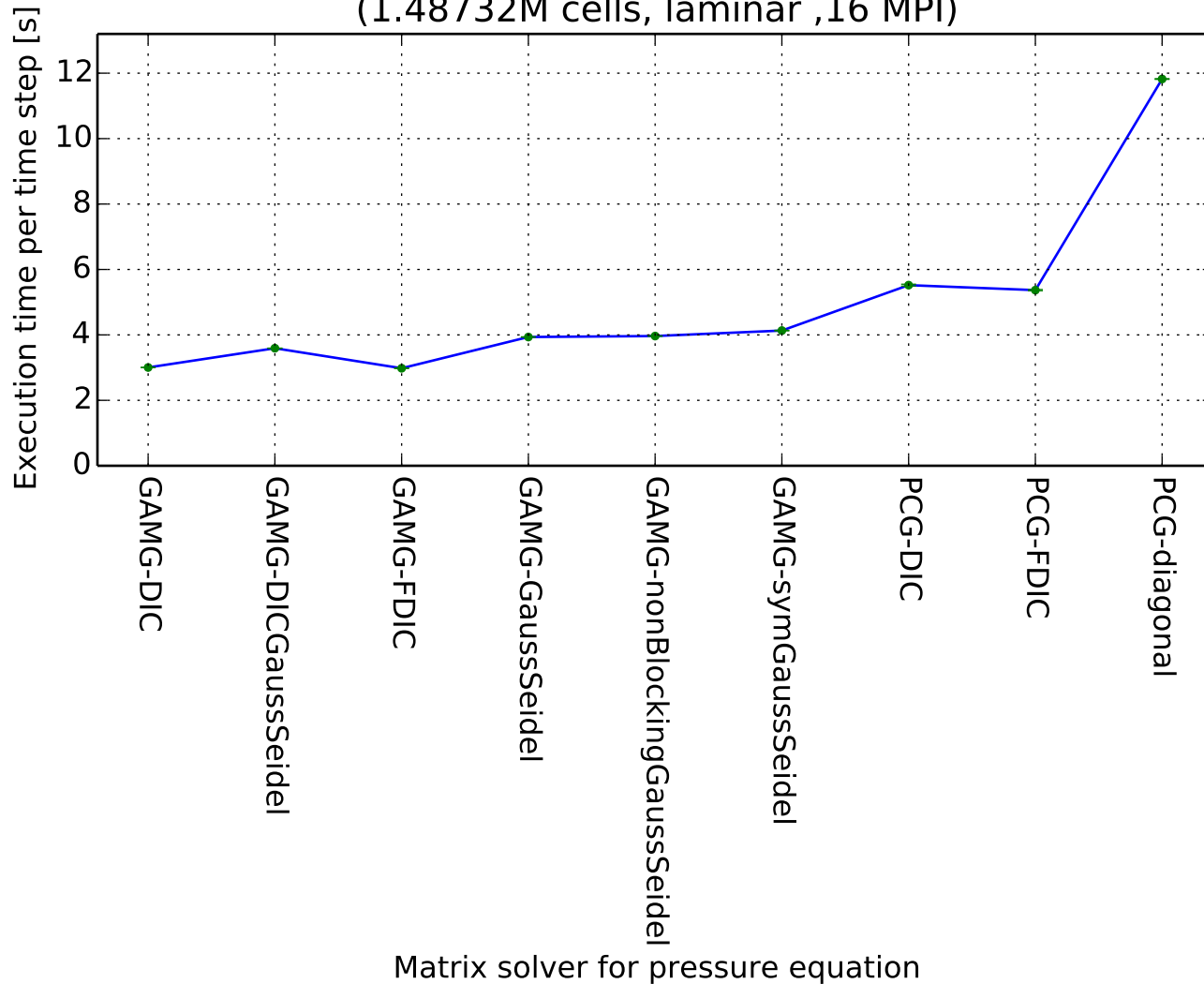
Execution time per time step
(1.48732M cells, WALE ,128 MPI)



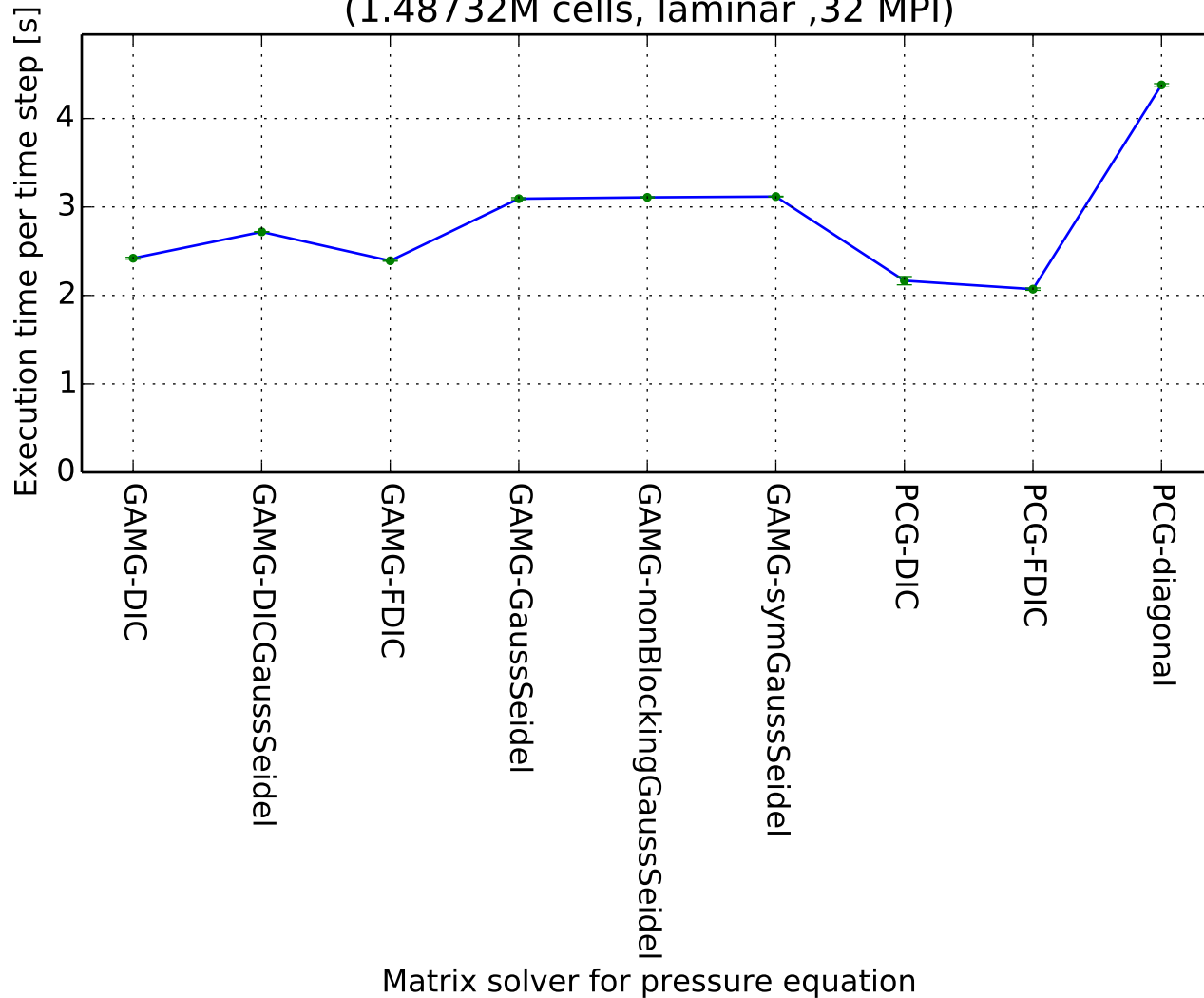
Execution time per time step
(1.48732M cells, WALE ,192 MPI)



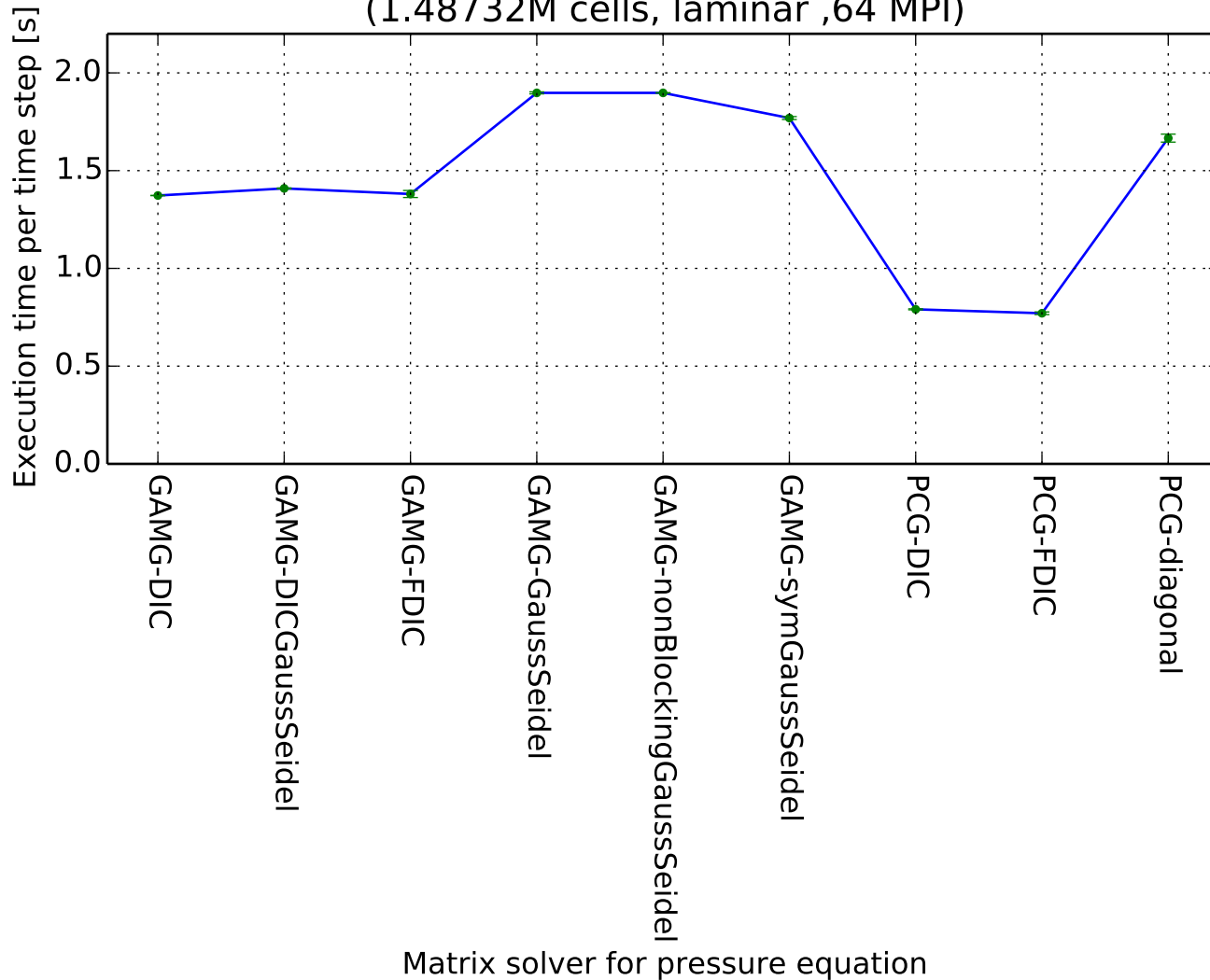
Execution time per time step
(1.48732M cells, laminar ,16 MPI)



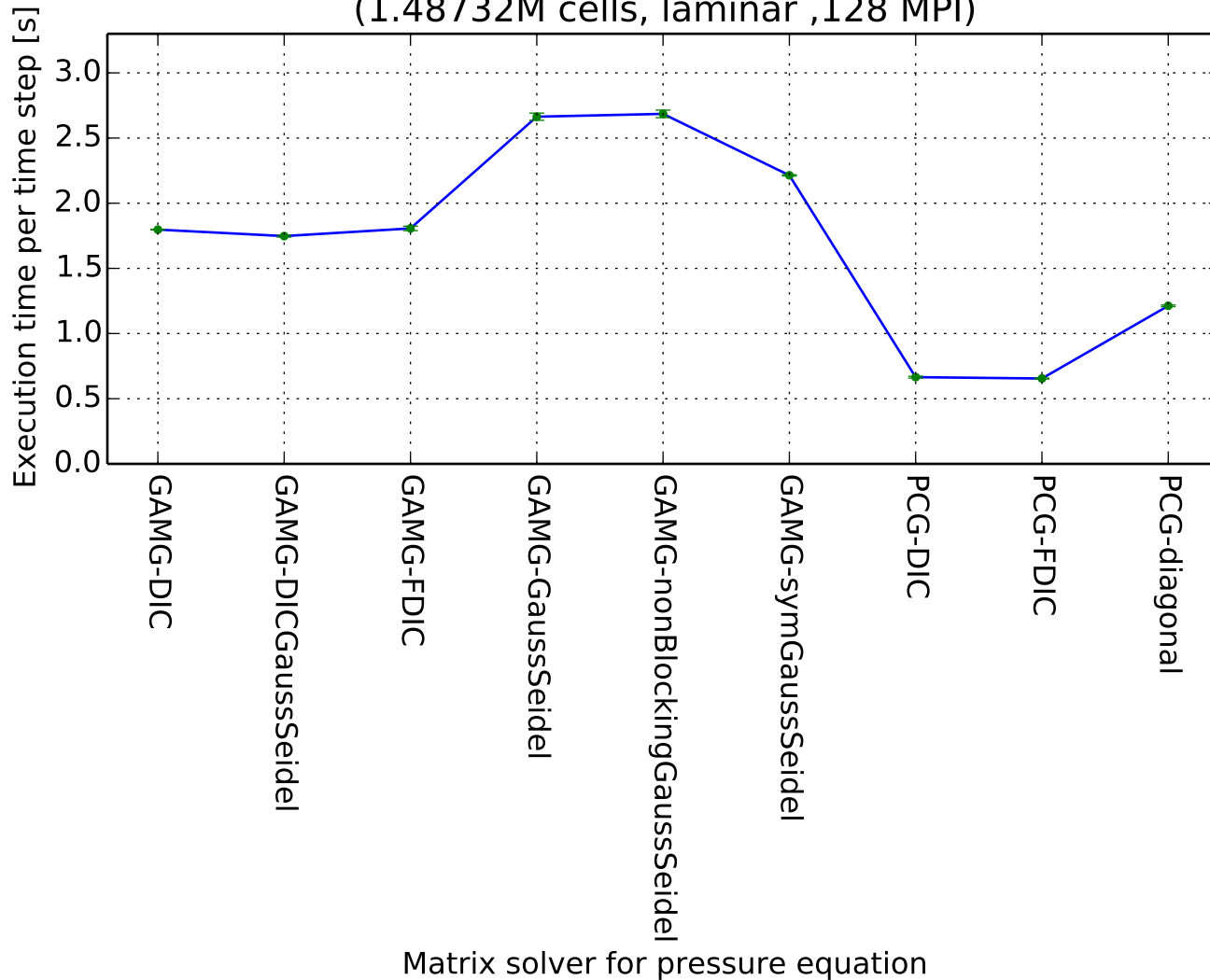
Execution time per time step
(1.48732M cells, laminar ,32 MPI)



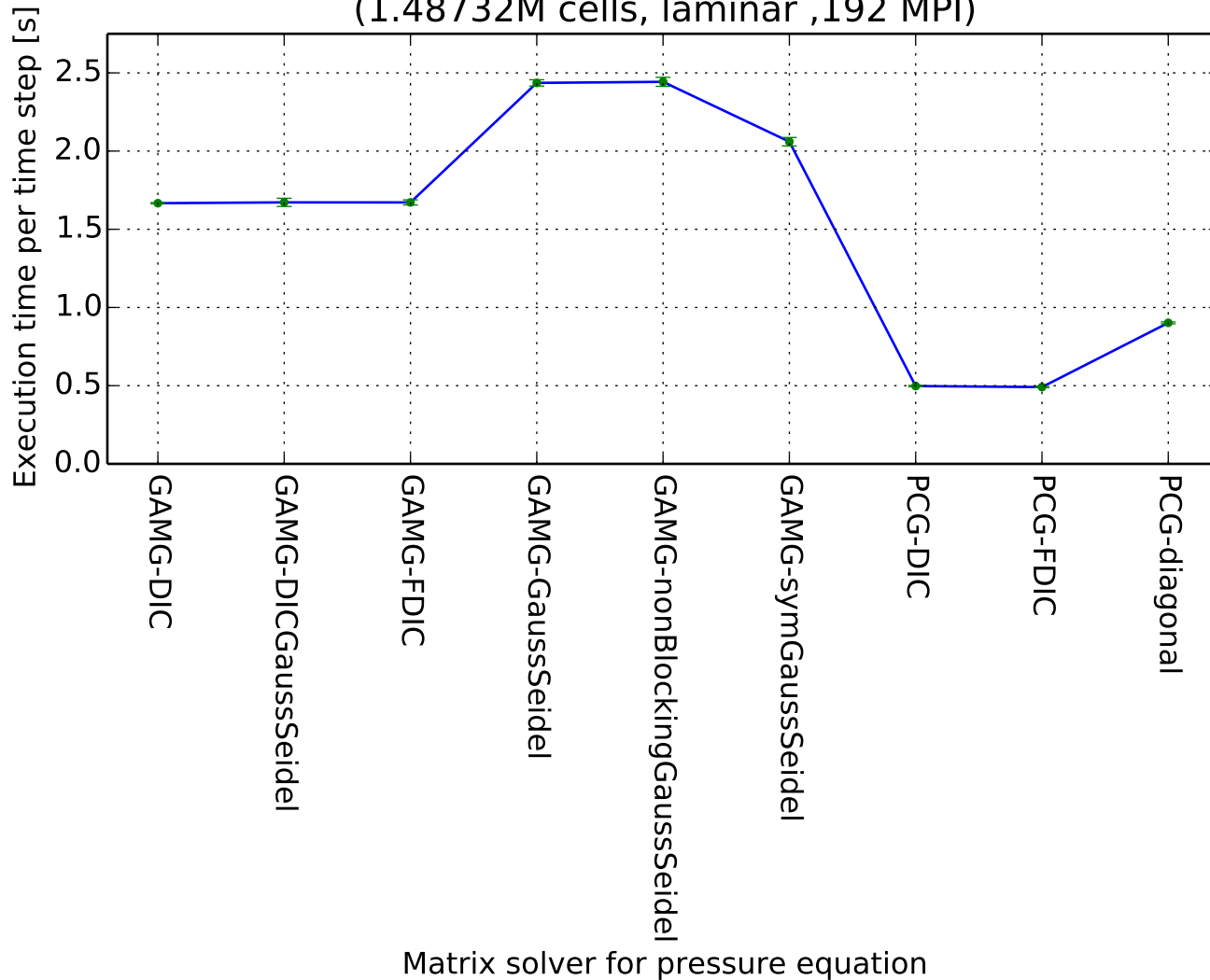
Execution time per time step
(1.48732M cells, laminar ,64 MPI)



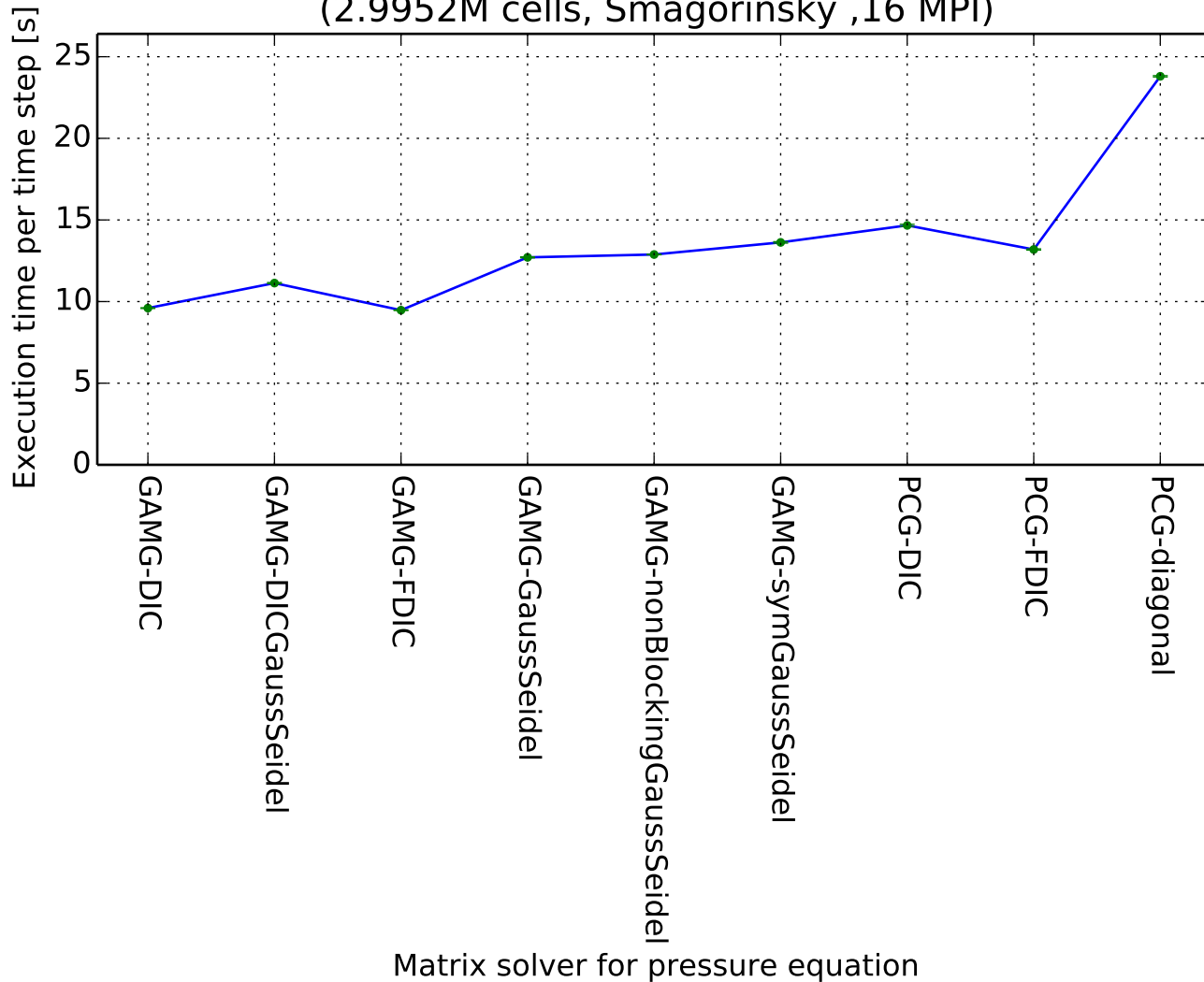
Execution time per time step
(1.48732M cells, laminar ,128 MPI)



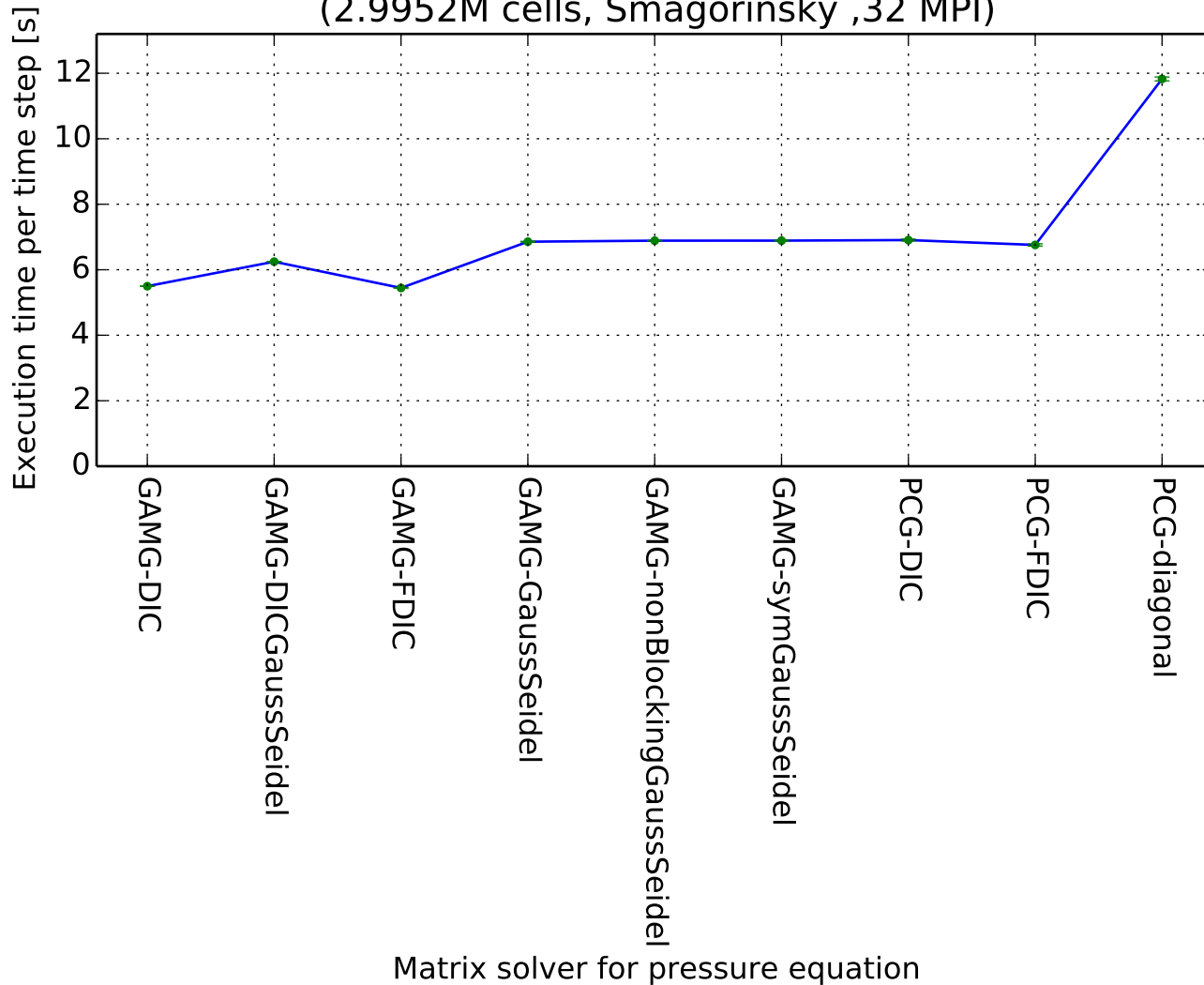
Execution time per time step
(1.48732M cells, laminar ,192 MPI)



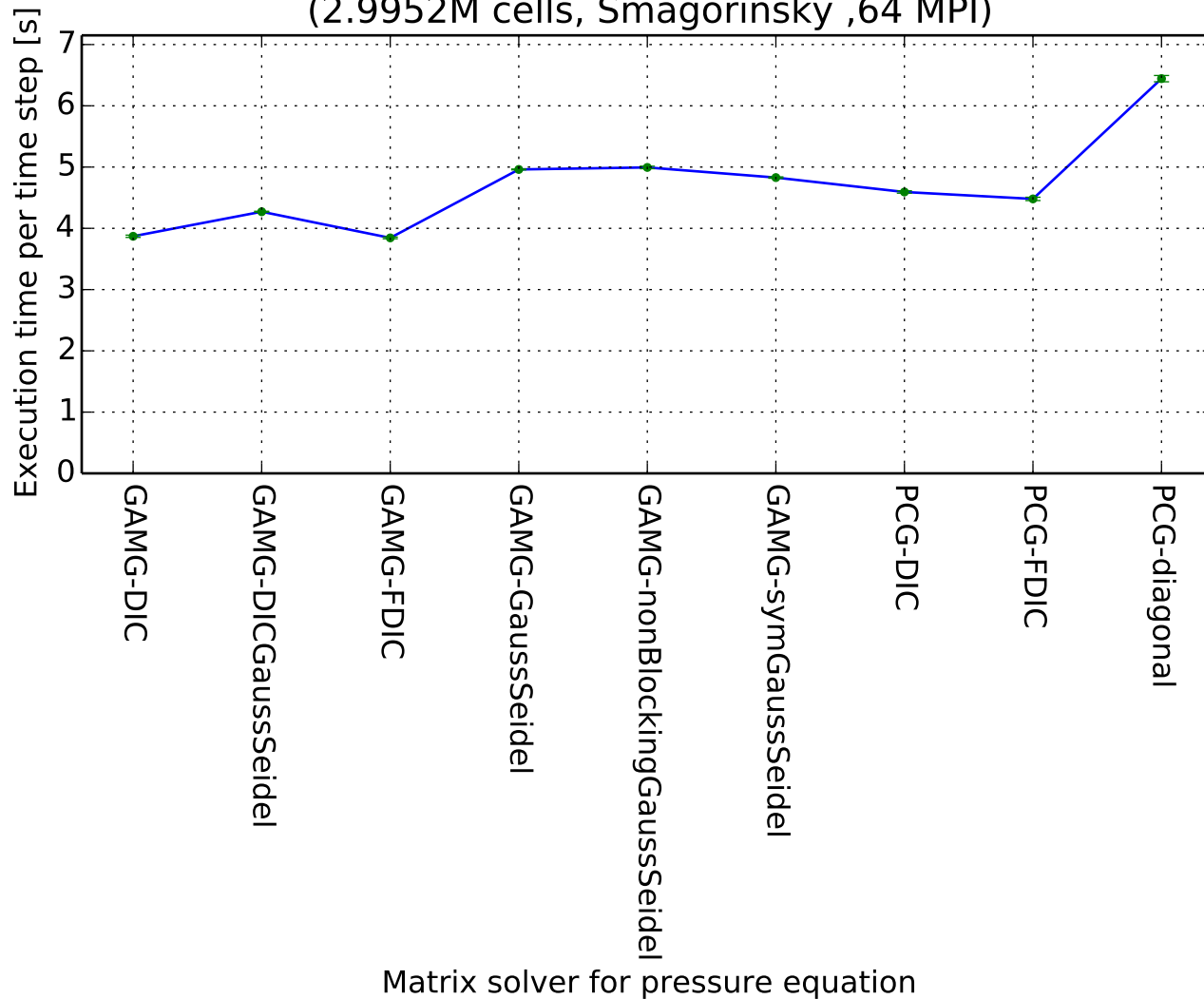
Execution time per time step
(2.9952M cells, Smagorinsky ,16 MPI)



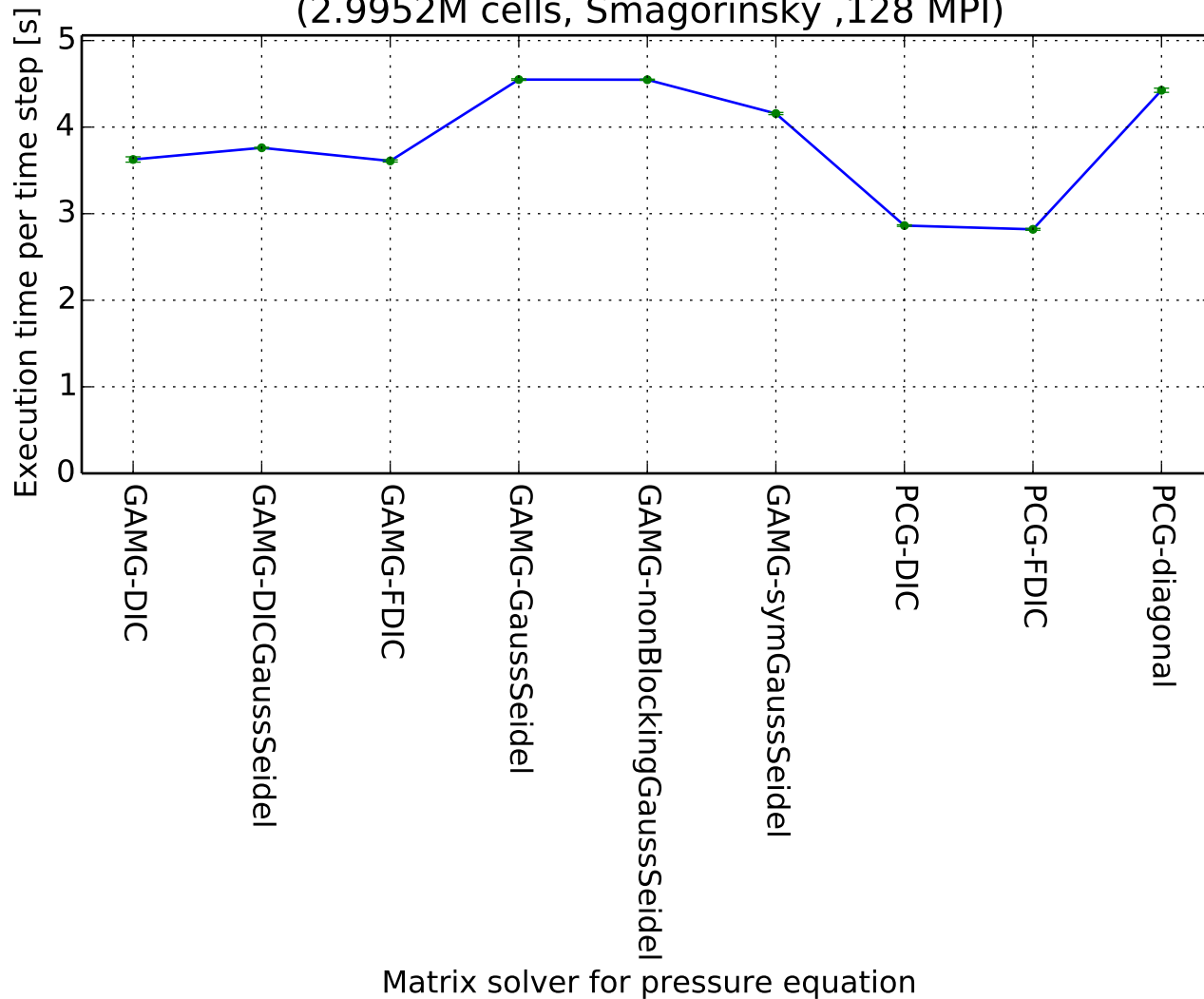
Execution time per time step
(2.9952M cells, Smagorinsky ,32 MPI)



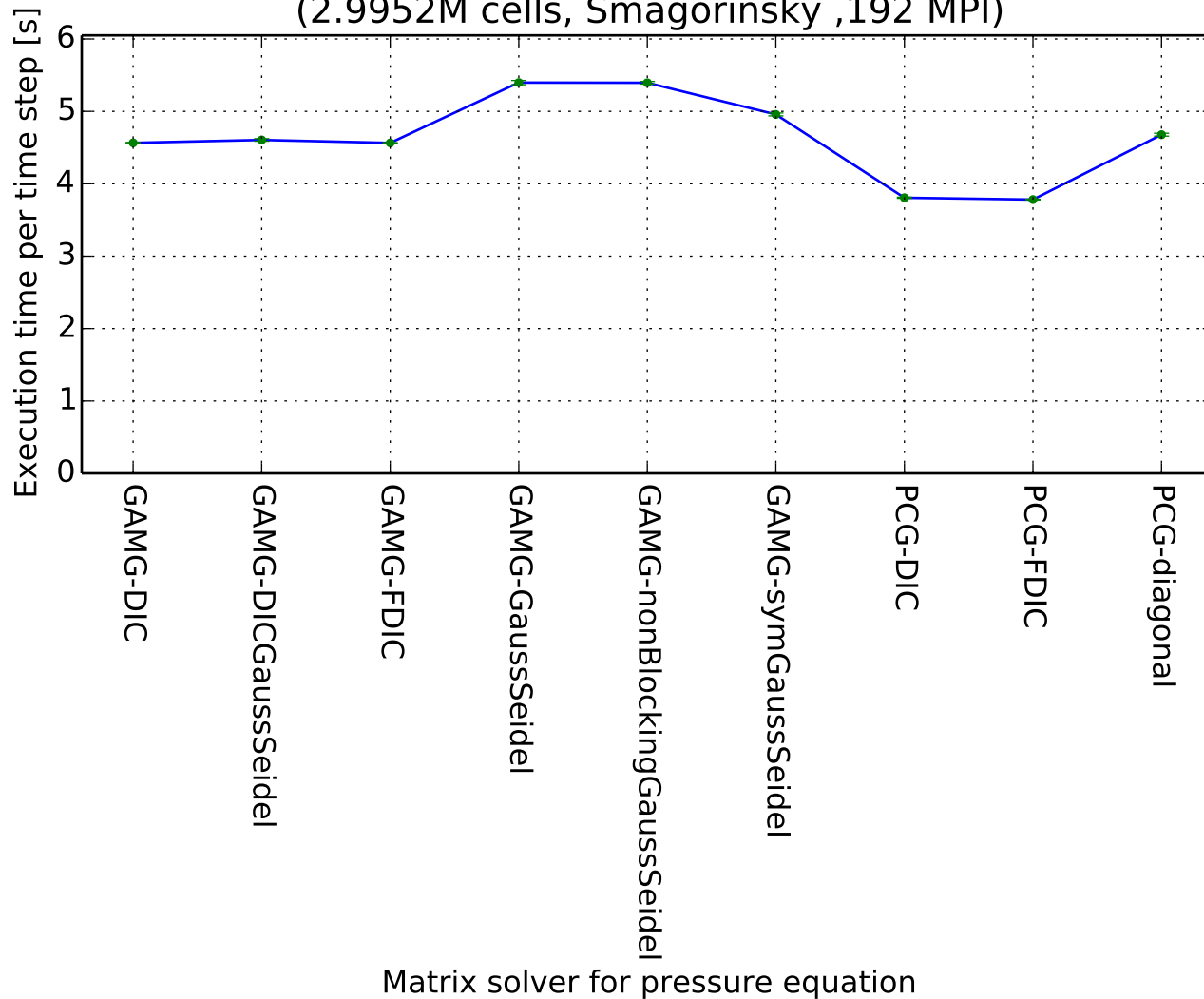
Execution time per time step
(2.9952M cells, Smagorinsky ,64 MPI)



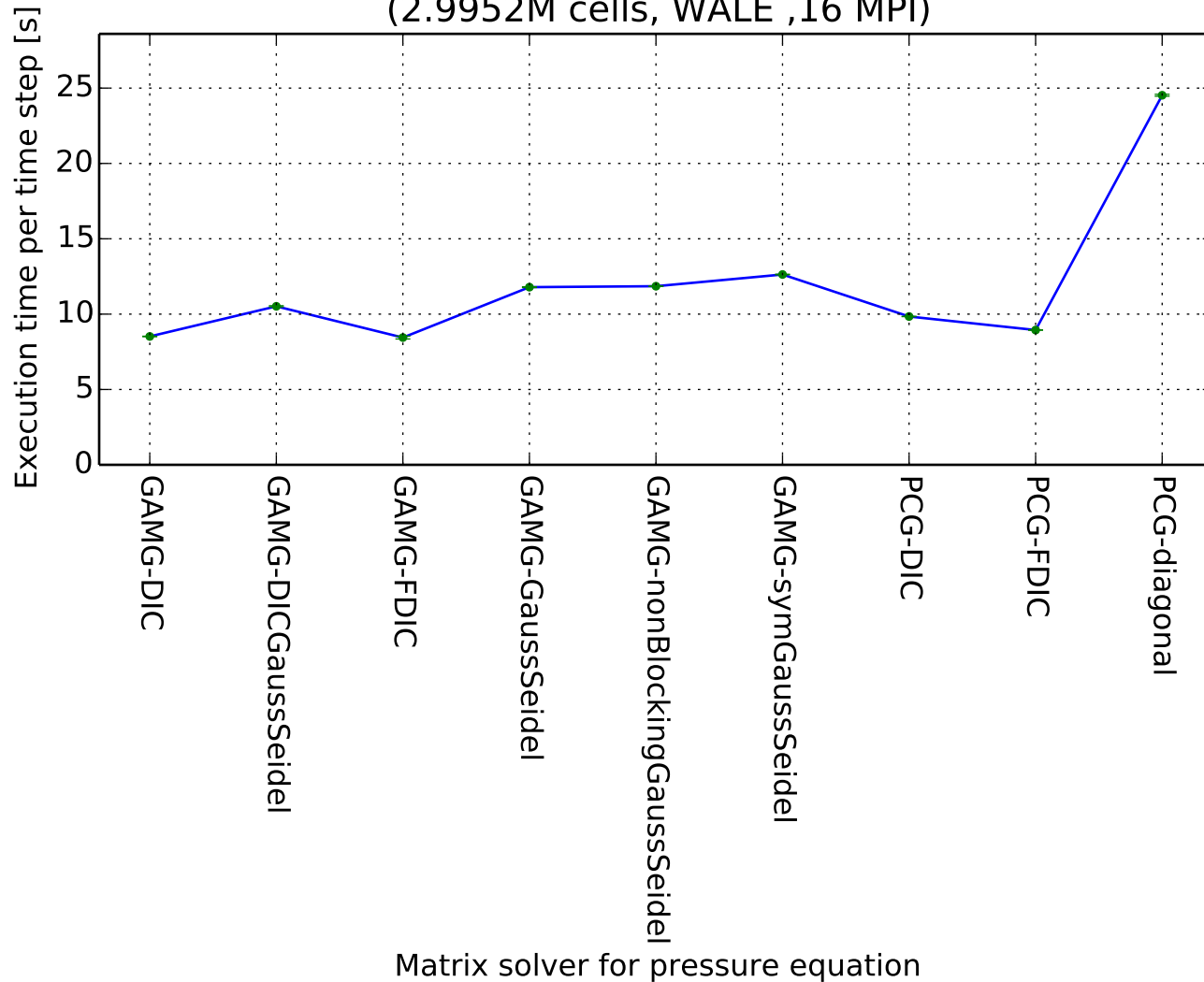
Execution time per time step
(2.9952M cells, Smagorinsky ,128 MPI)



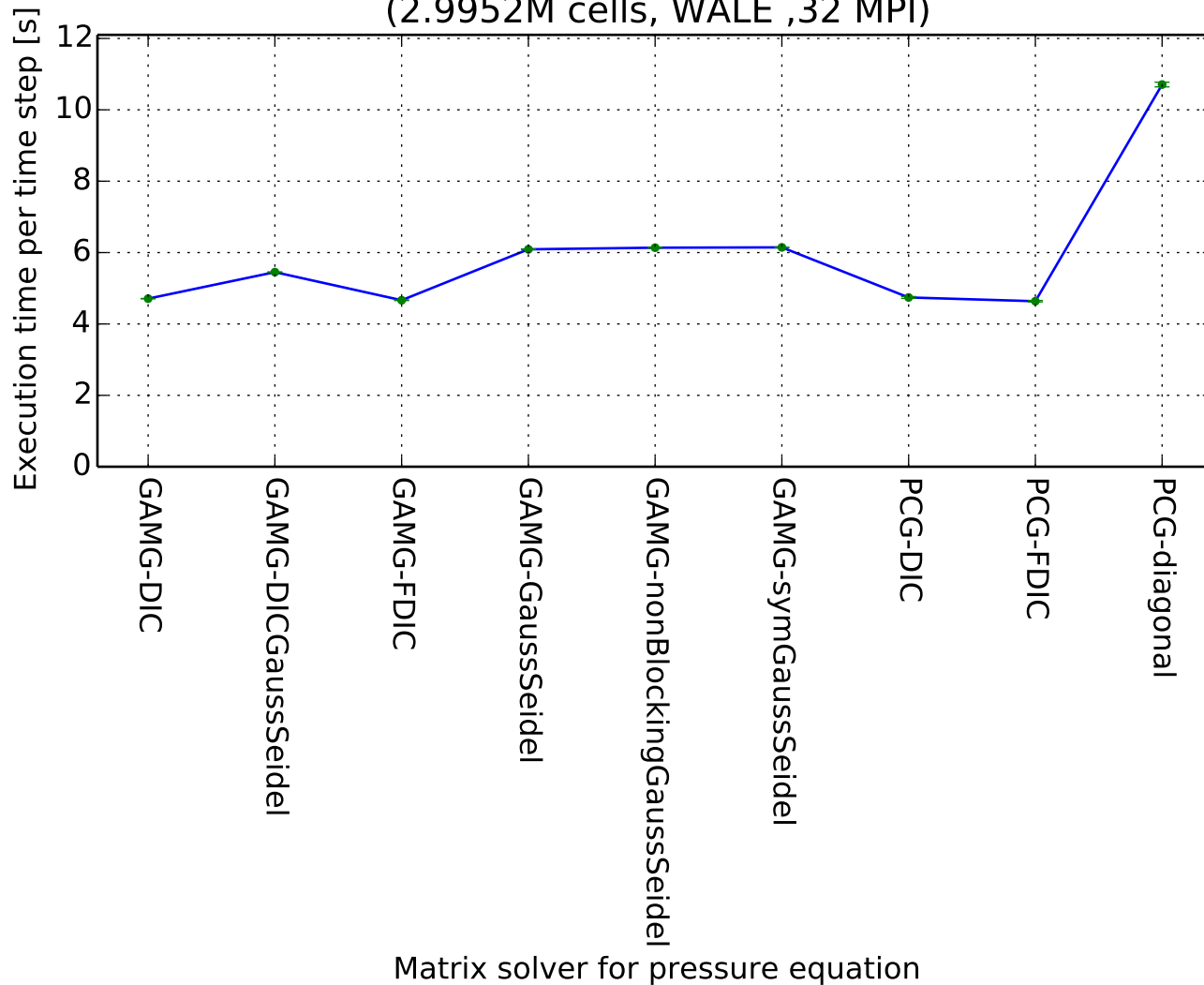
Execution time per time step
(2.9952M cells, Smagorinsky ,192 MPI)



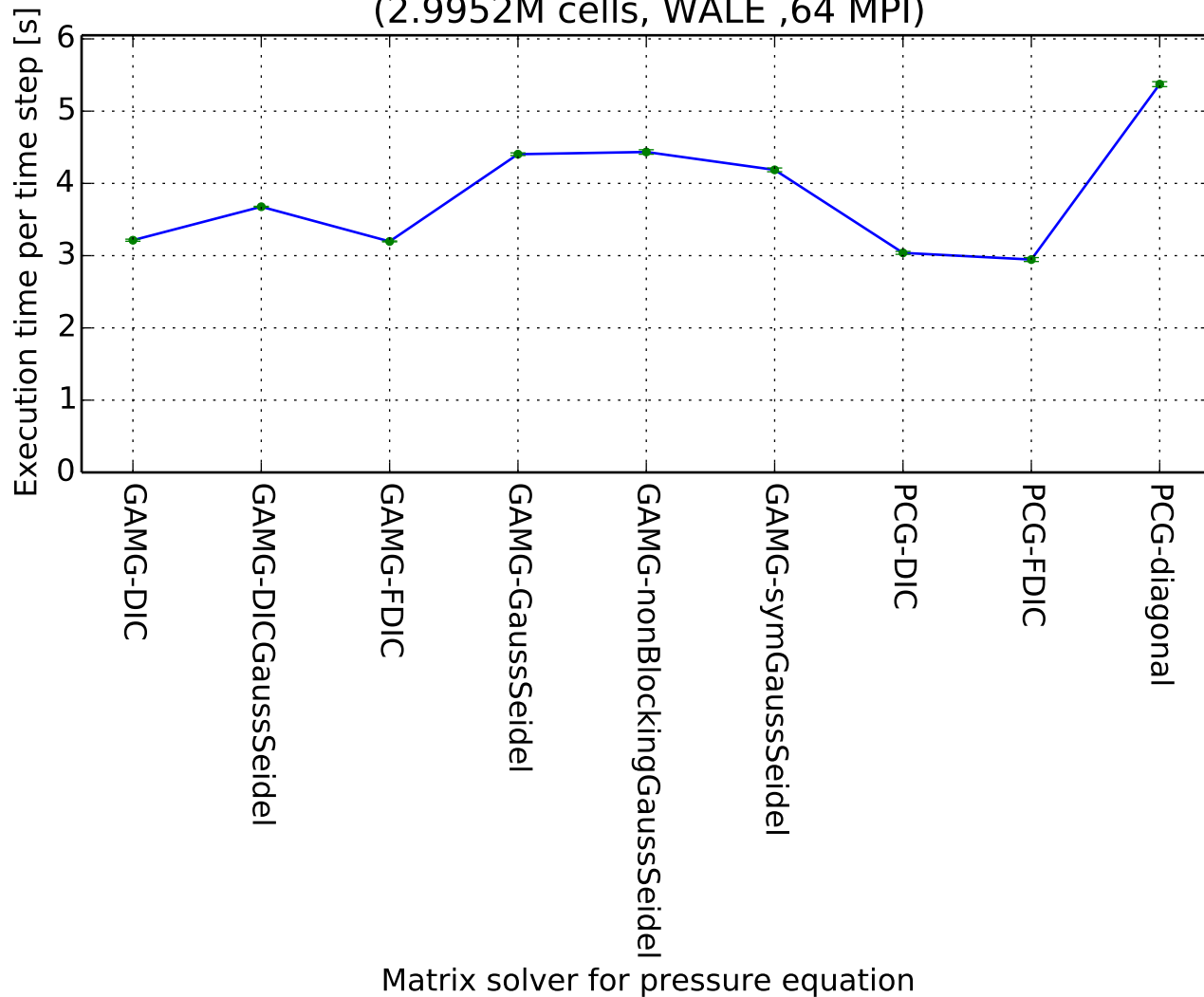
Execution time per time step
(2.9952M cells, WALE ,16 MPI)



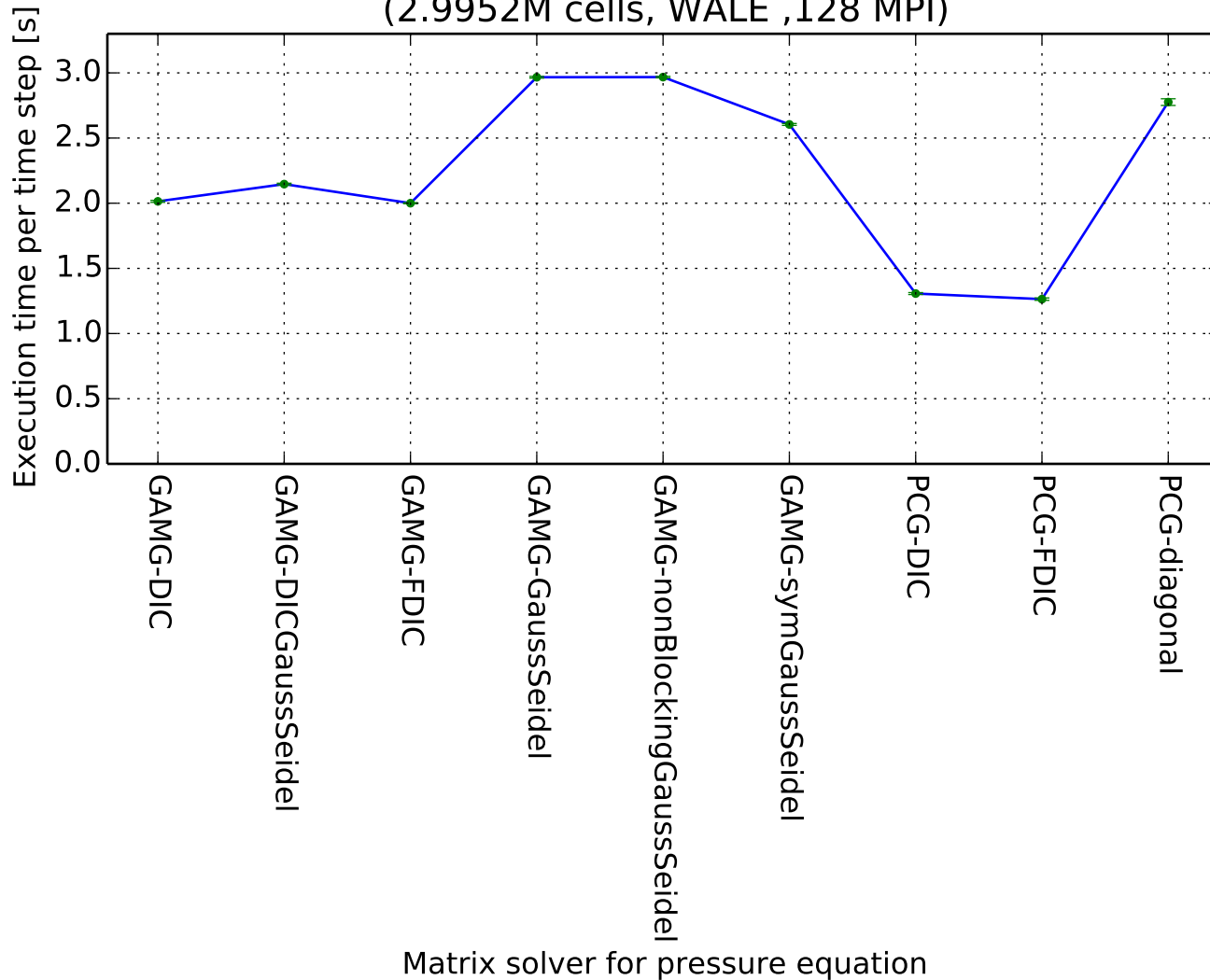
Execution time per time step
(2.9952M cells, WALE ,32 MPI)



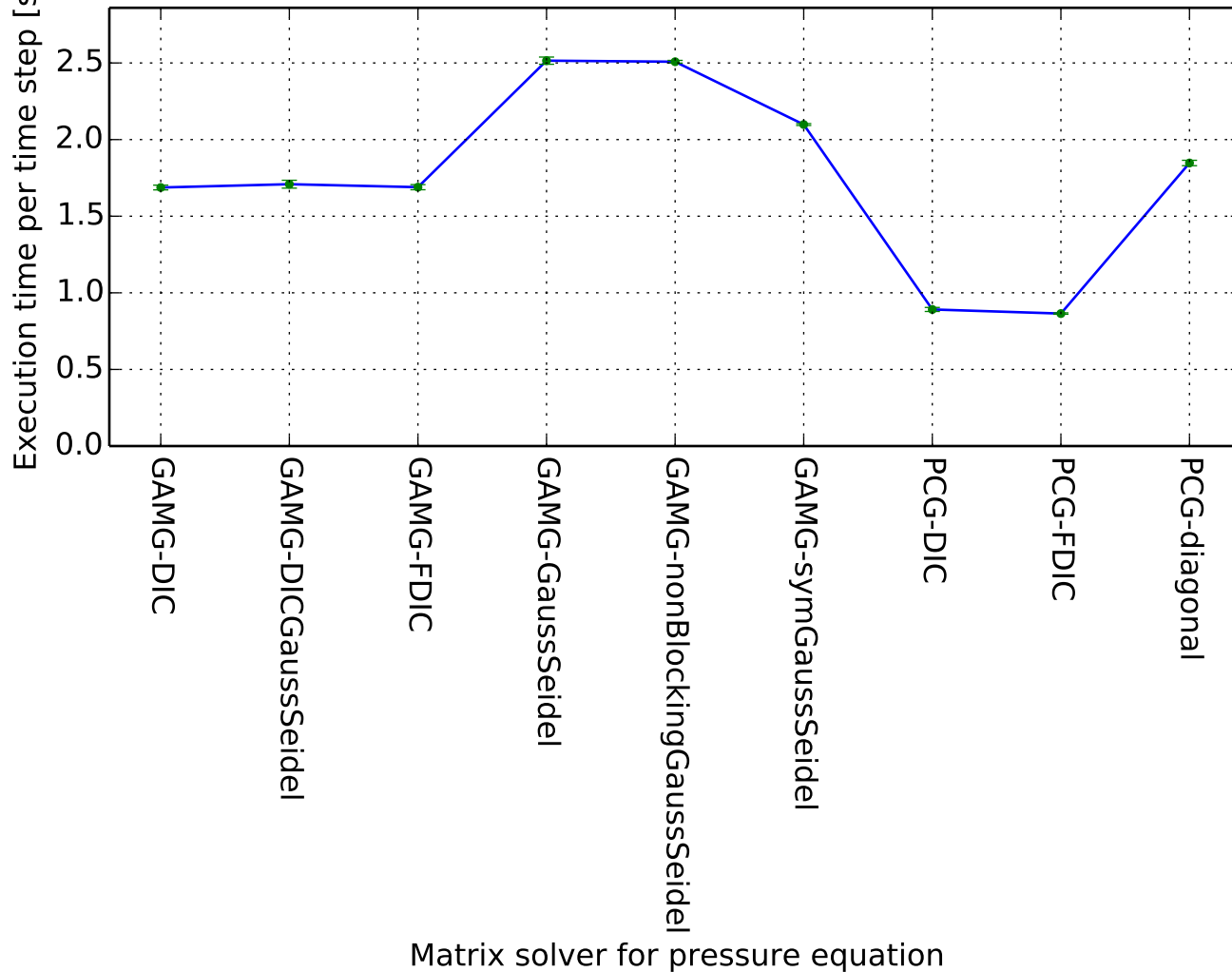
Execution time per time step
(2.9952M cells, WALE ,64 MPI)



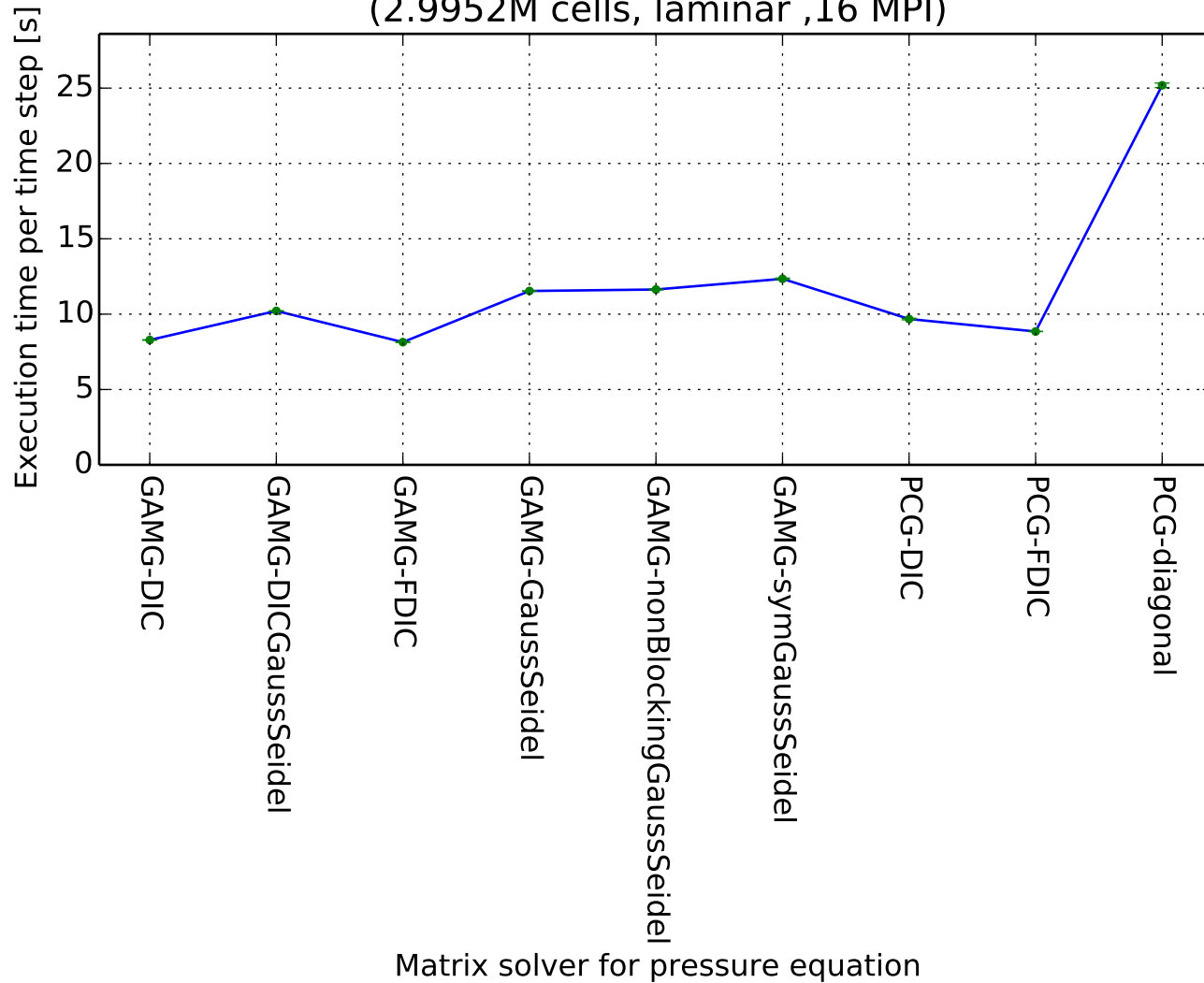
Execution time per time step
(2.9952M cells, WALE ,128 MPI)



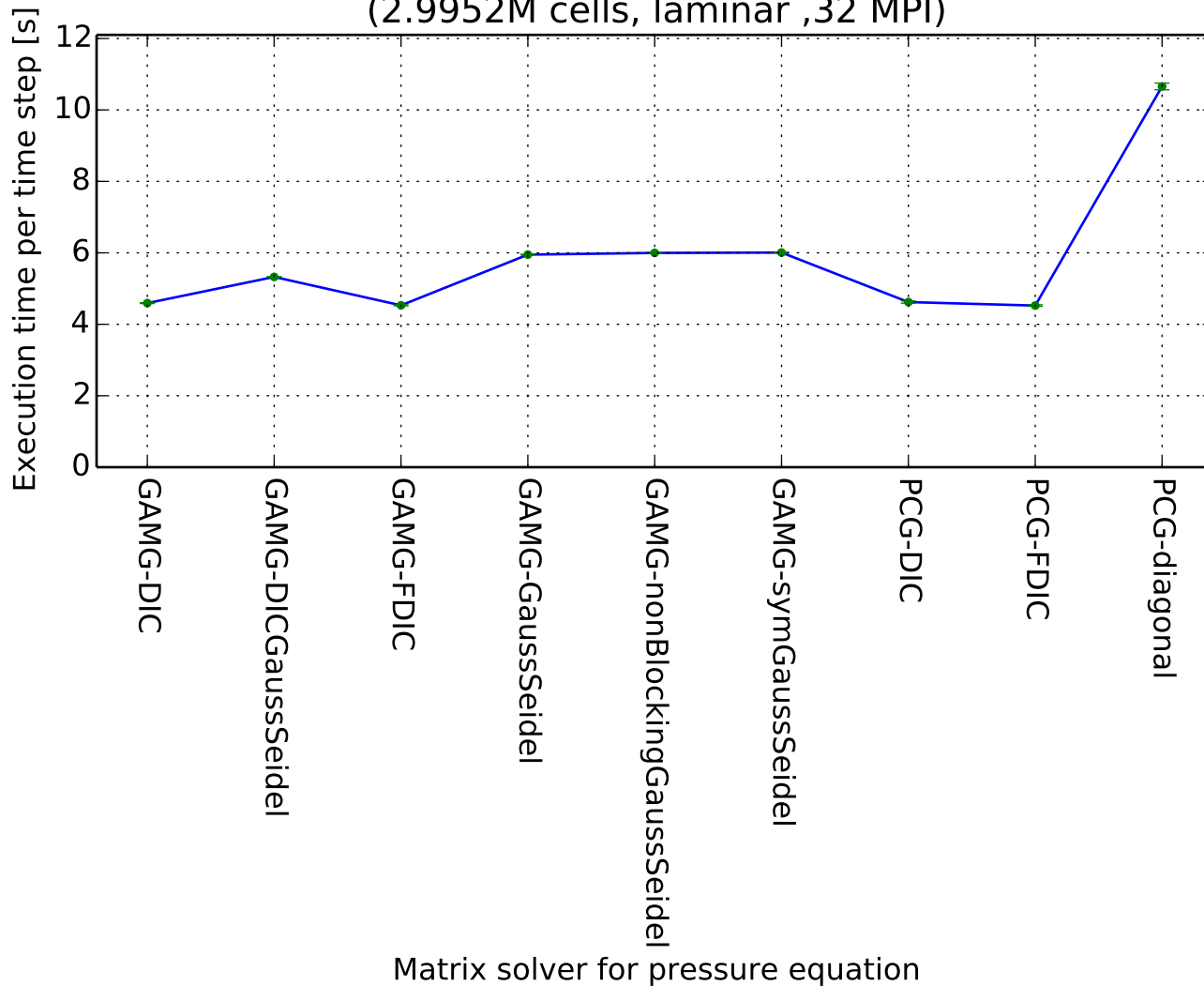
Execution time per time step
(2.9952M cells, WALE ,192 MPI)



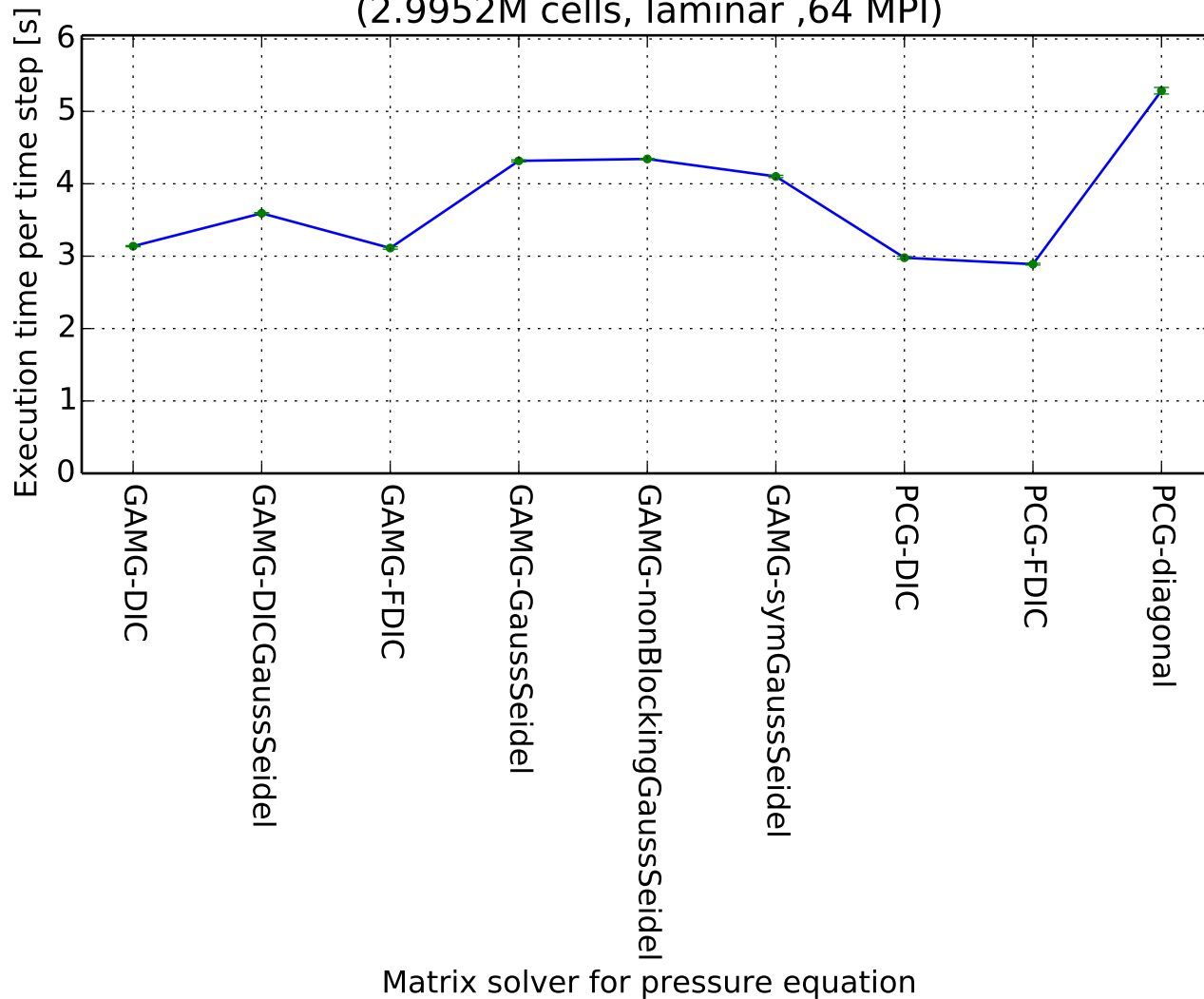
Execution time per time step
(2.9952M cells, laminar ,16 MPI)



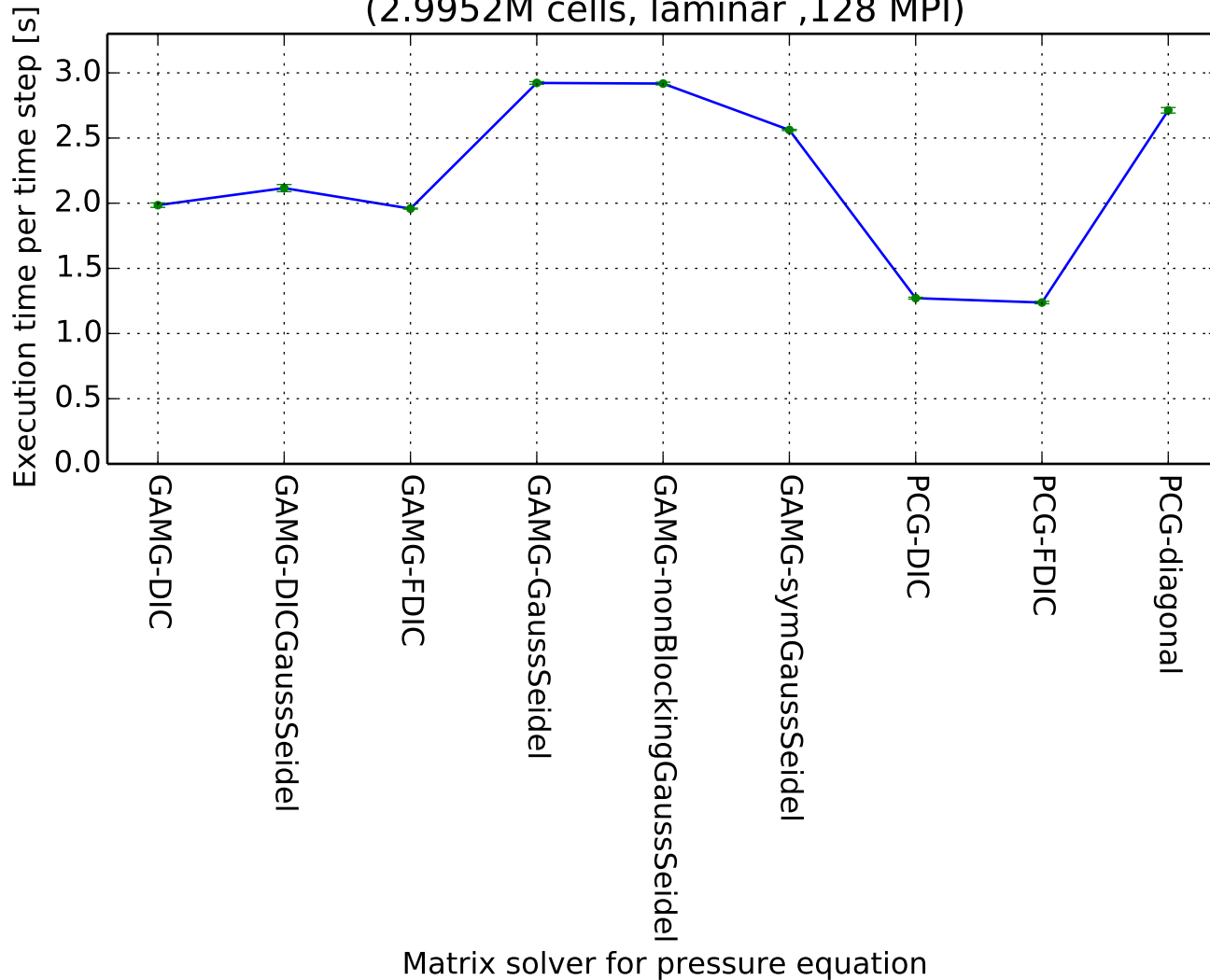
Execution time per time step
(2.9952M cells, laminar ,32 MPI)



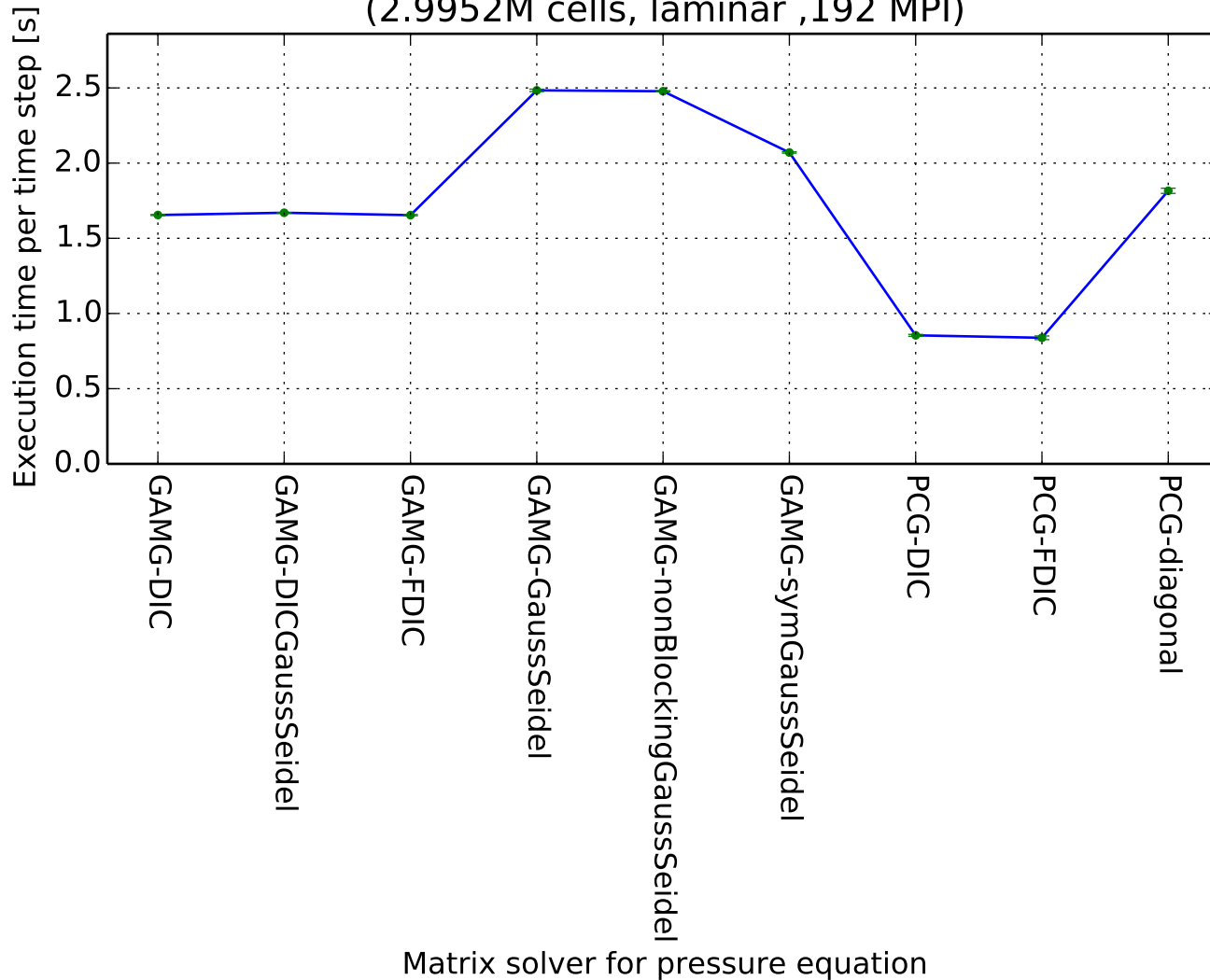
Execution time per time step
(2.9952M cells, laminar ,64 MPI)



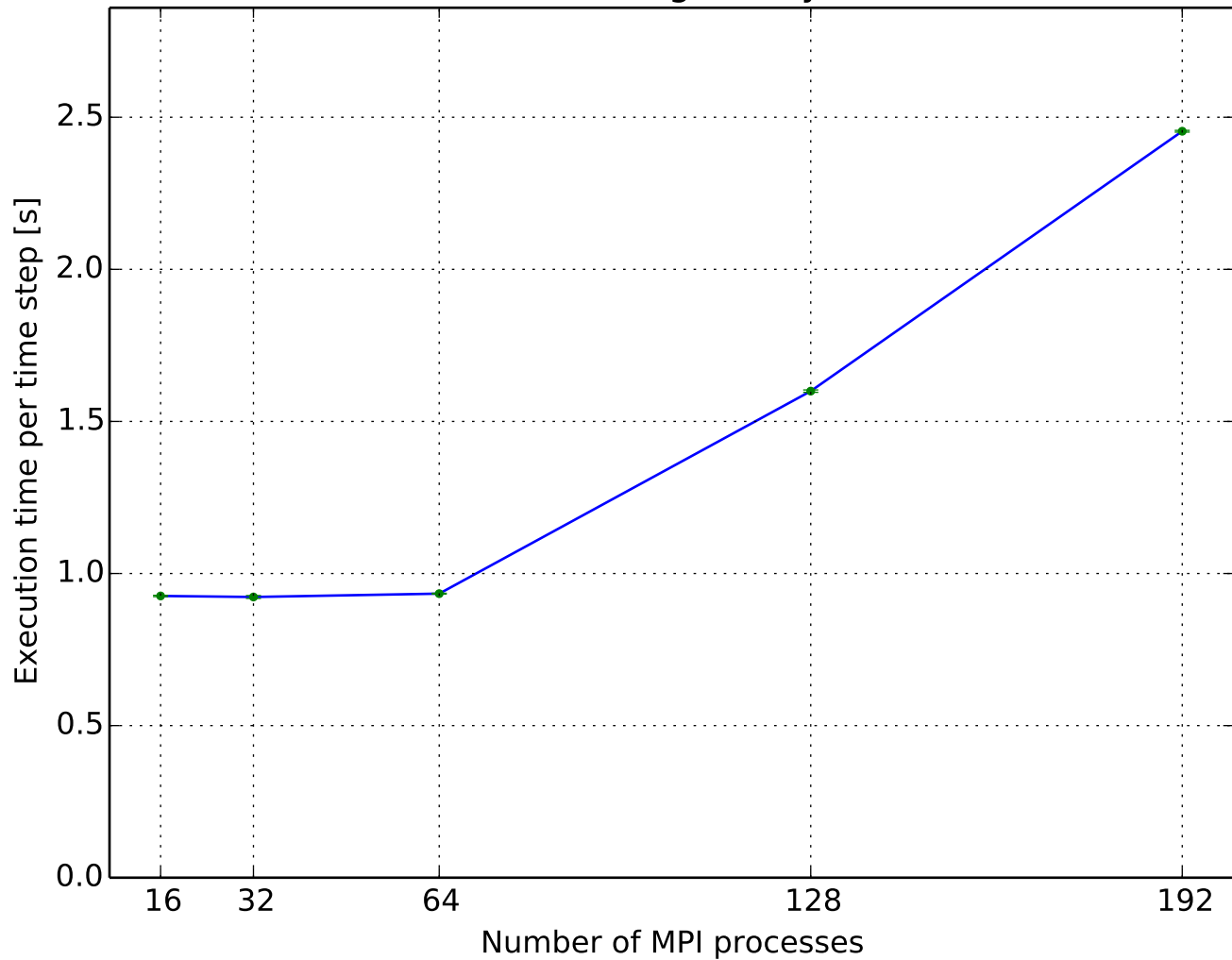
Execution time per time step
(2.9952M cells, laminar ,128 MPI)



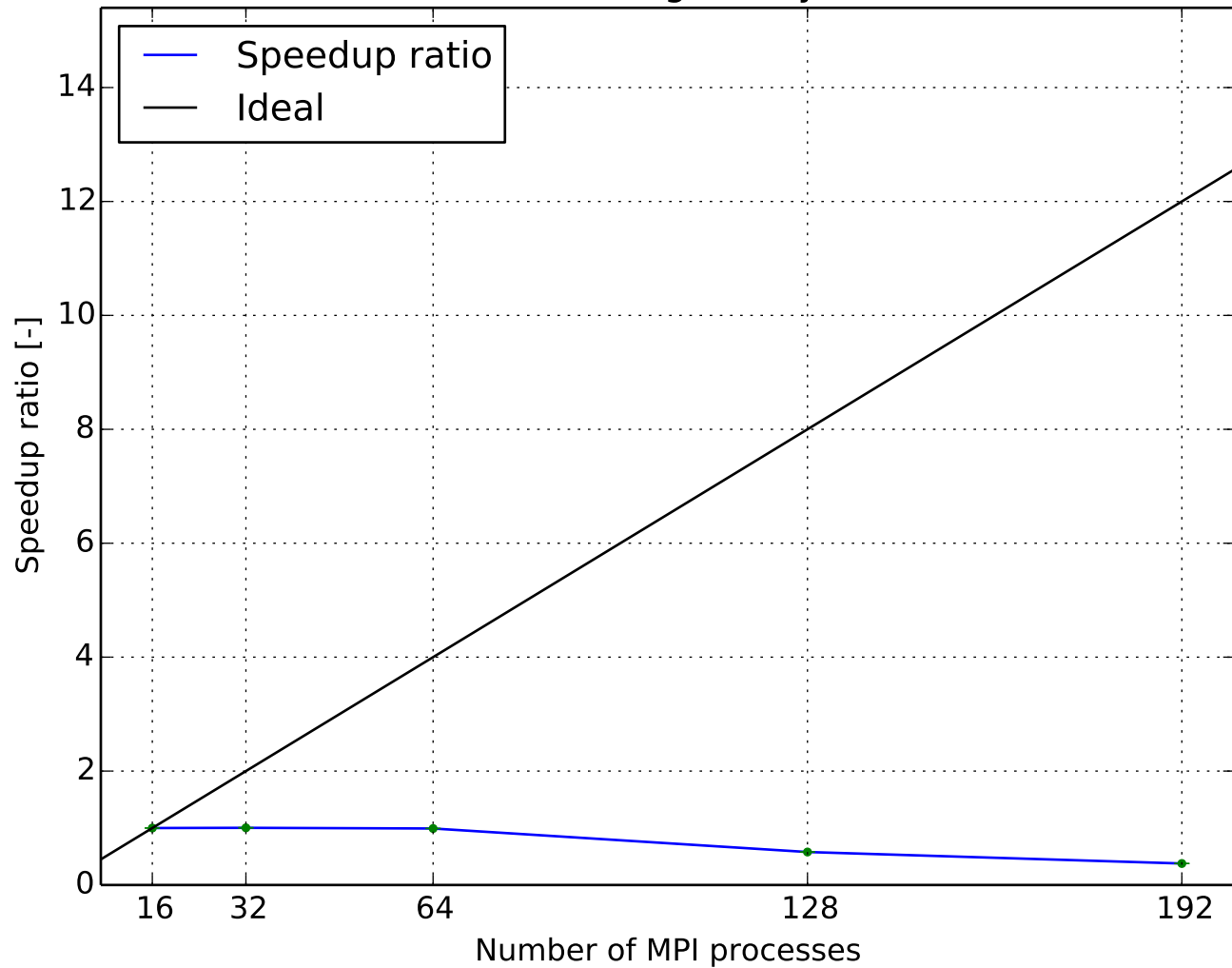
Execution time per time step
(2.9952M cells, laminar ,192 MPI)



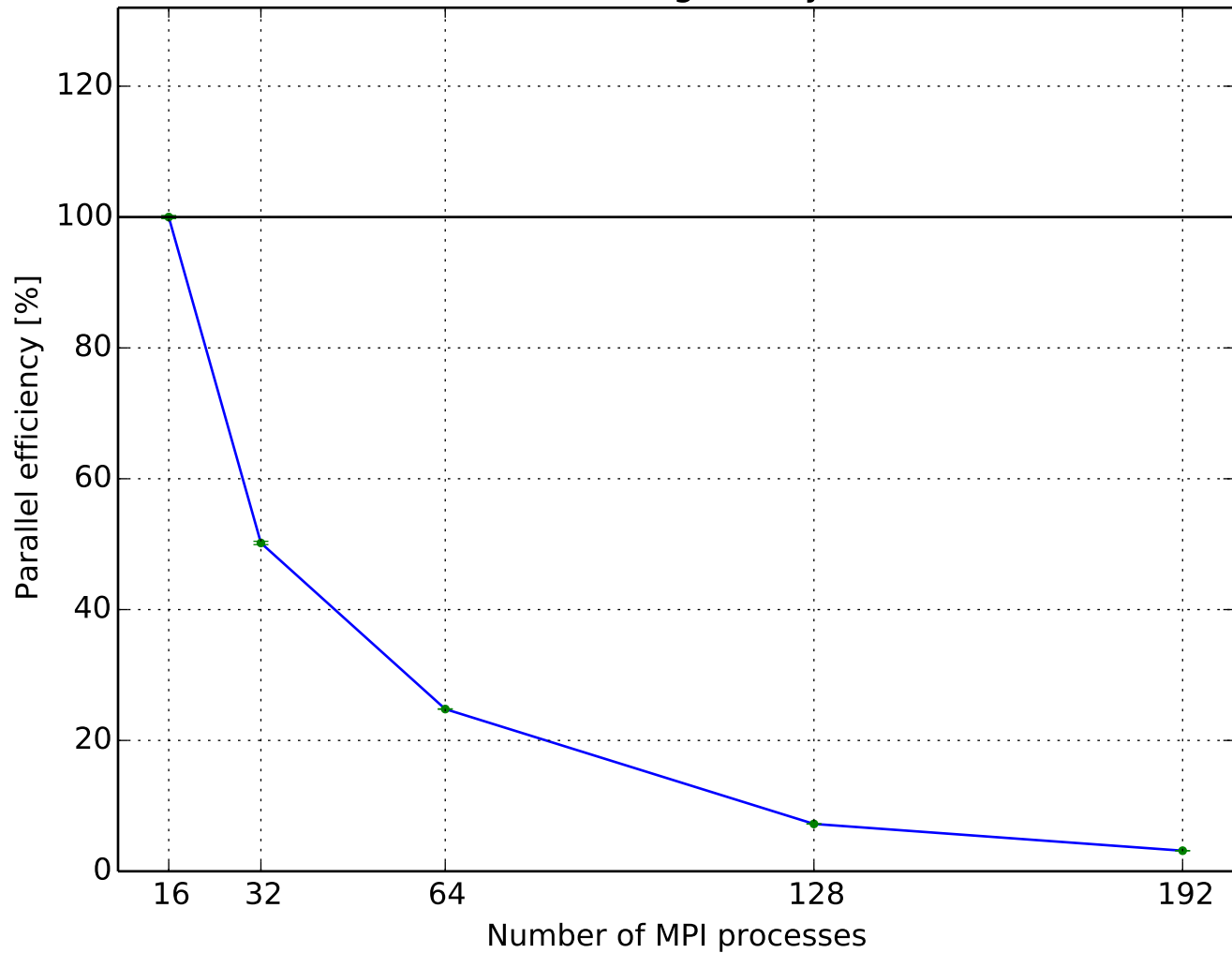
Execution time per time step
(0.3744M cells, Smagorinsky ,GAMG-DIC)



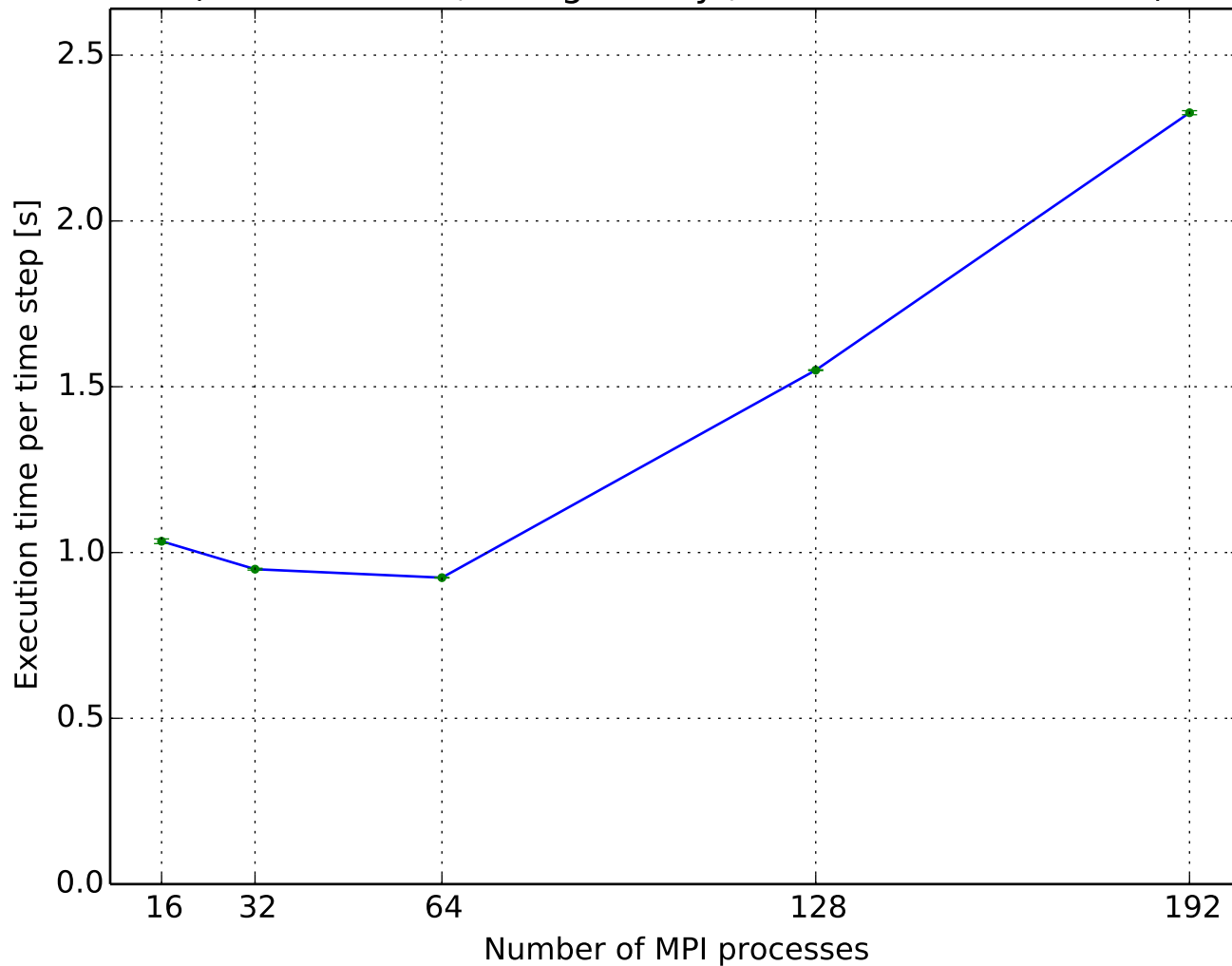
Speedup ratio
(0.3744M cells, Smagorinsky ,GAMG-DIC)



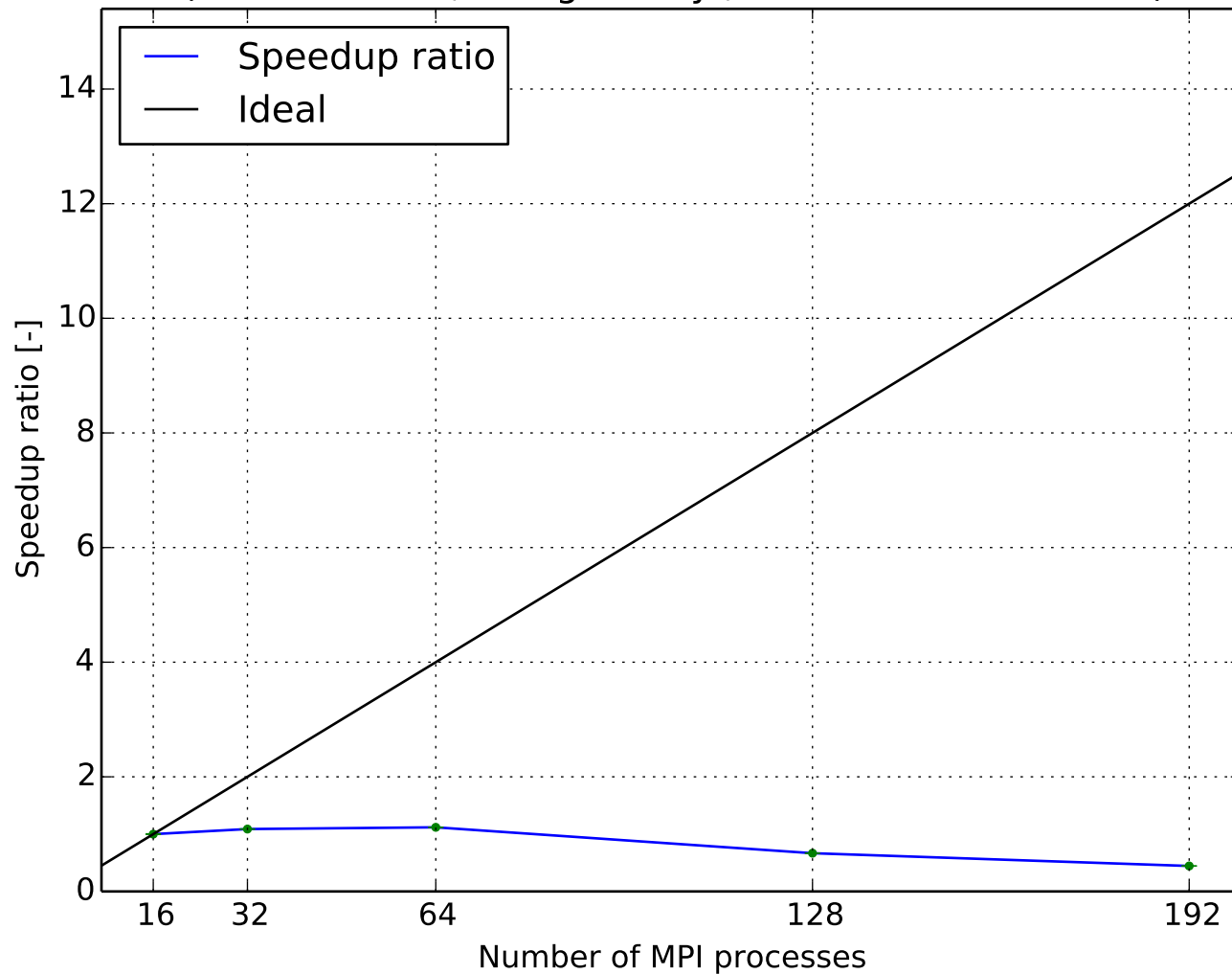
Parallel efficiency
(0.3744M cells, Smagorinsky ,GAMG-DIC)



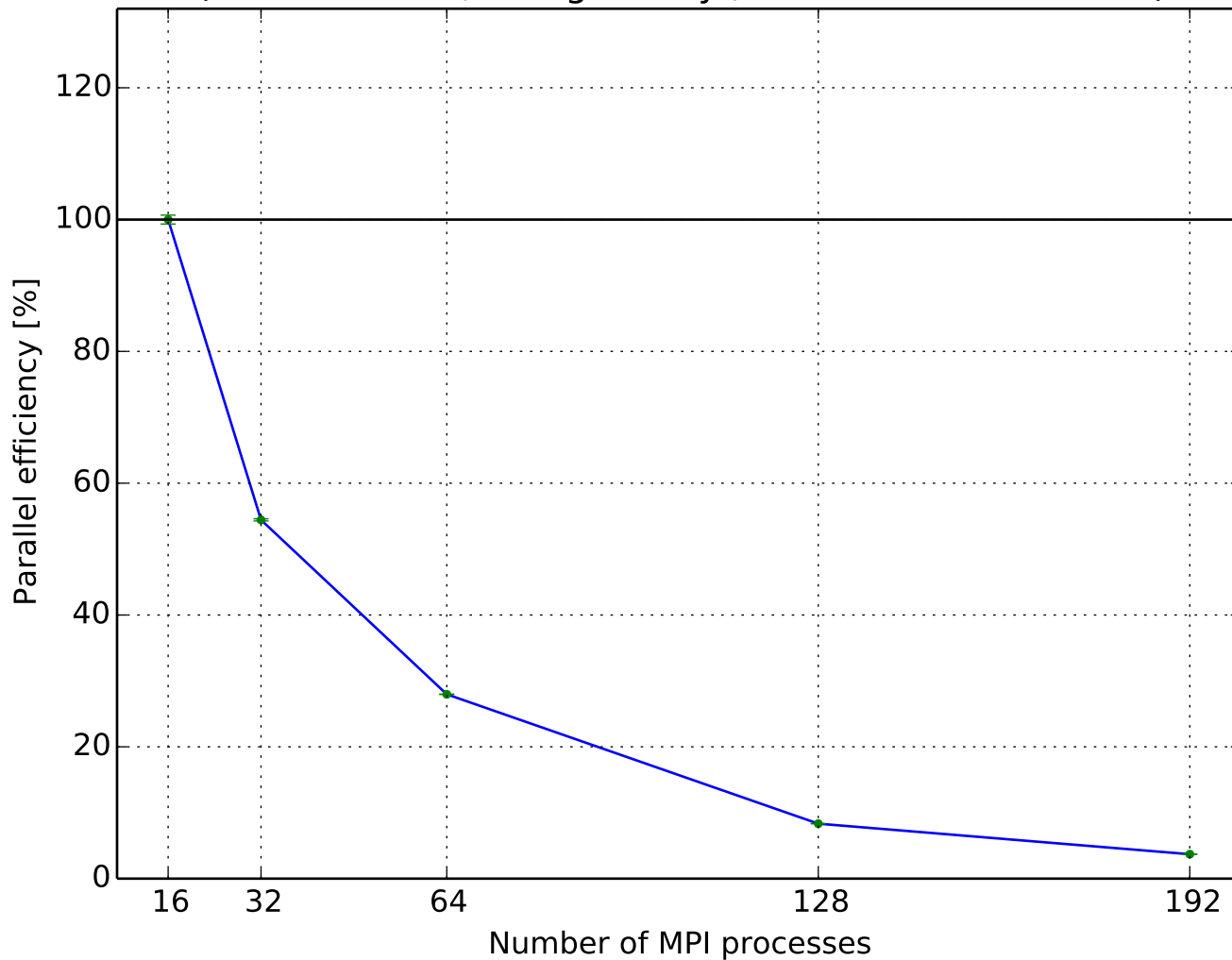
Execution time per time step
(0.3744M cells, Smagorinsky ,GAMG-DICGaussSeidel)



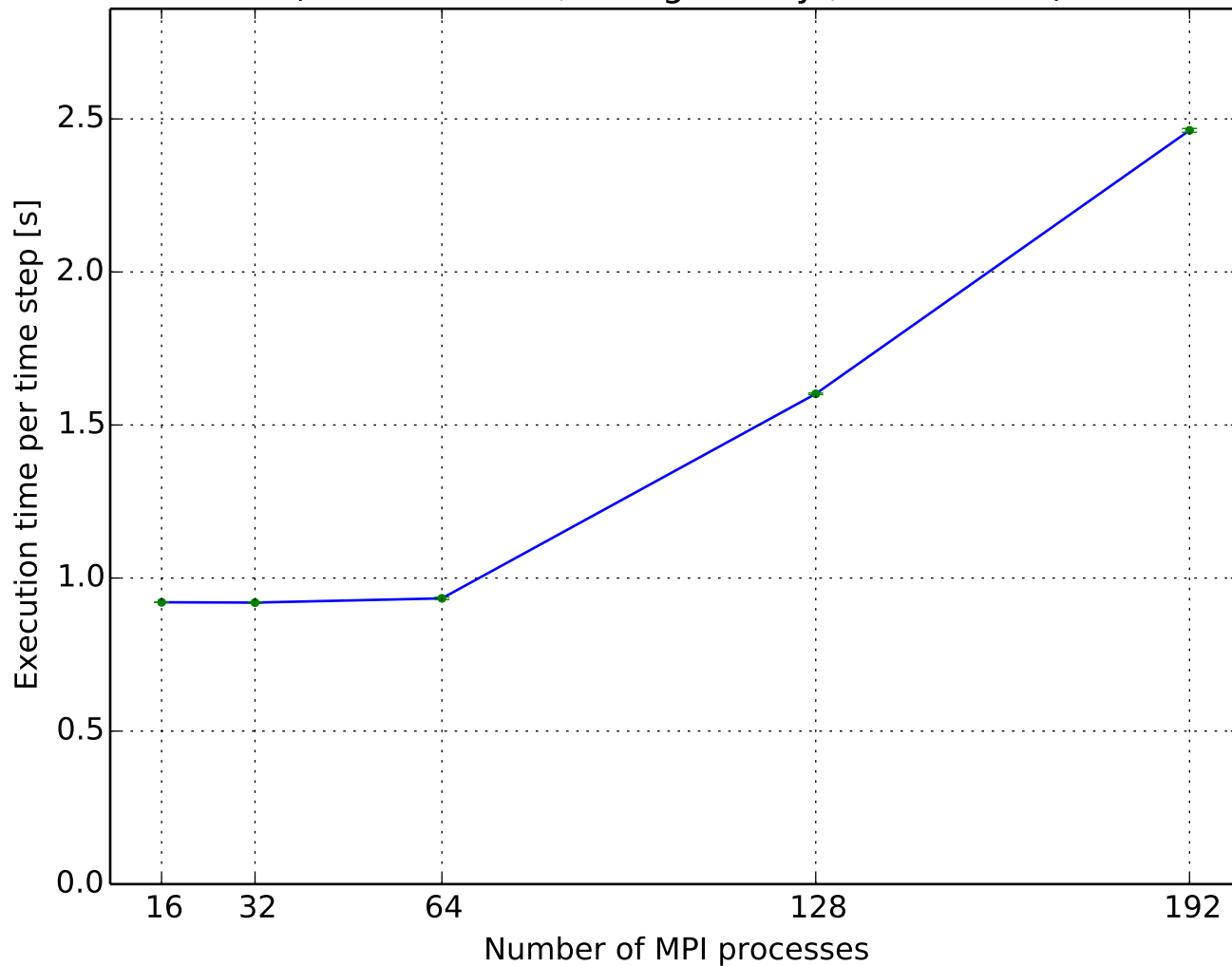
Speedup ratio
(0.3744M cells, Smagorinsky ,GAMG-DICGaussSeidel)



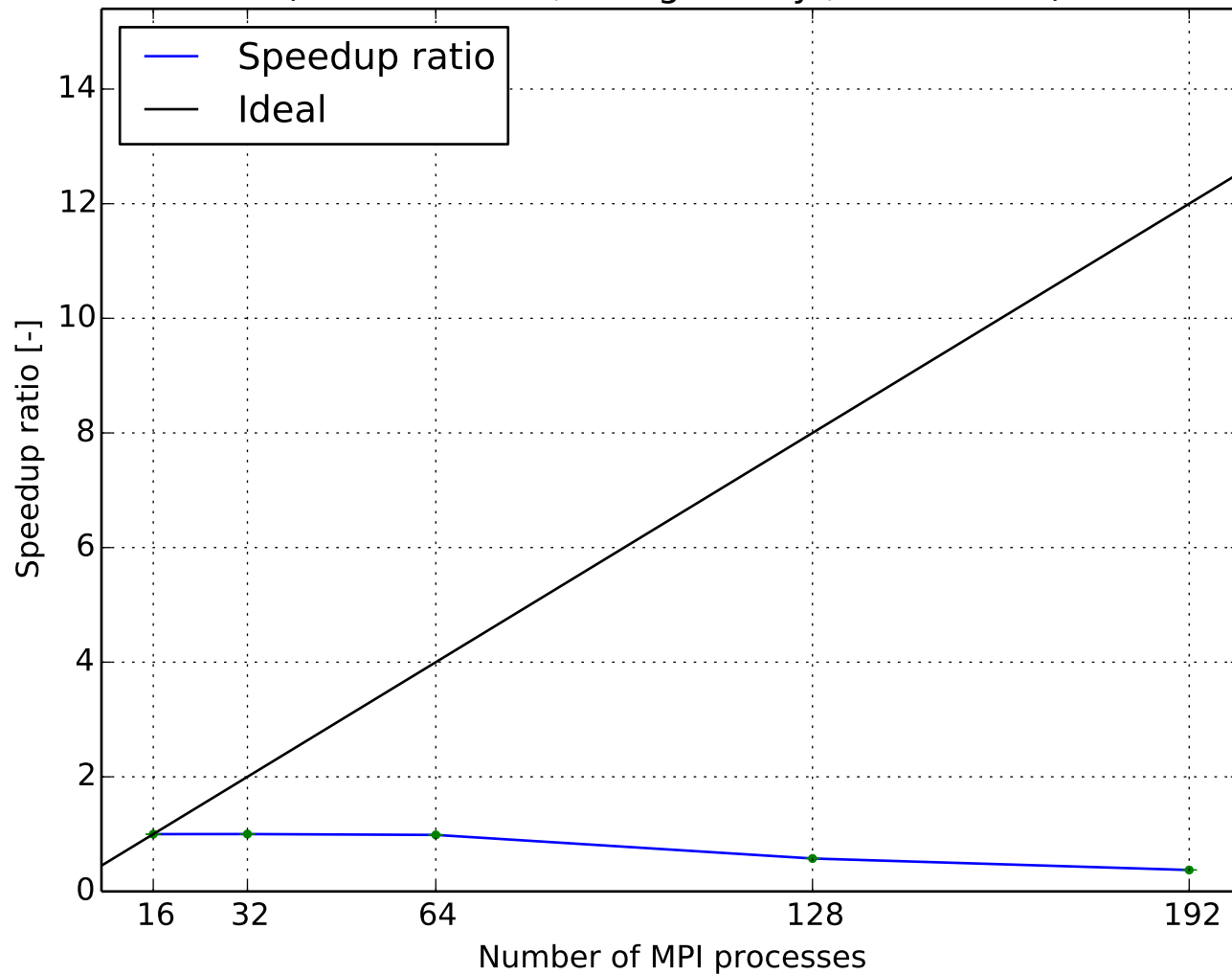
Parallel efficiency
(0.3744M cells, Smagorinsky ,GAMG-DICGaussSeidel)



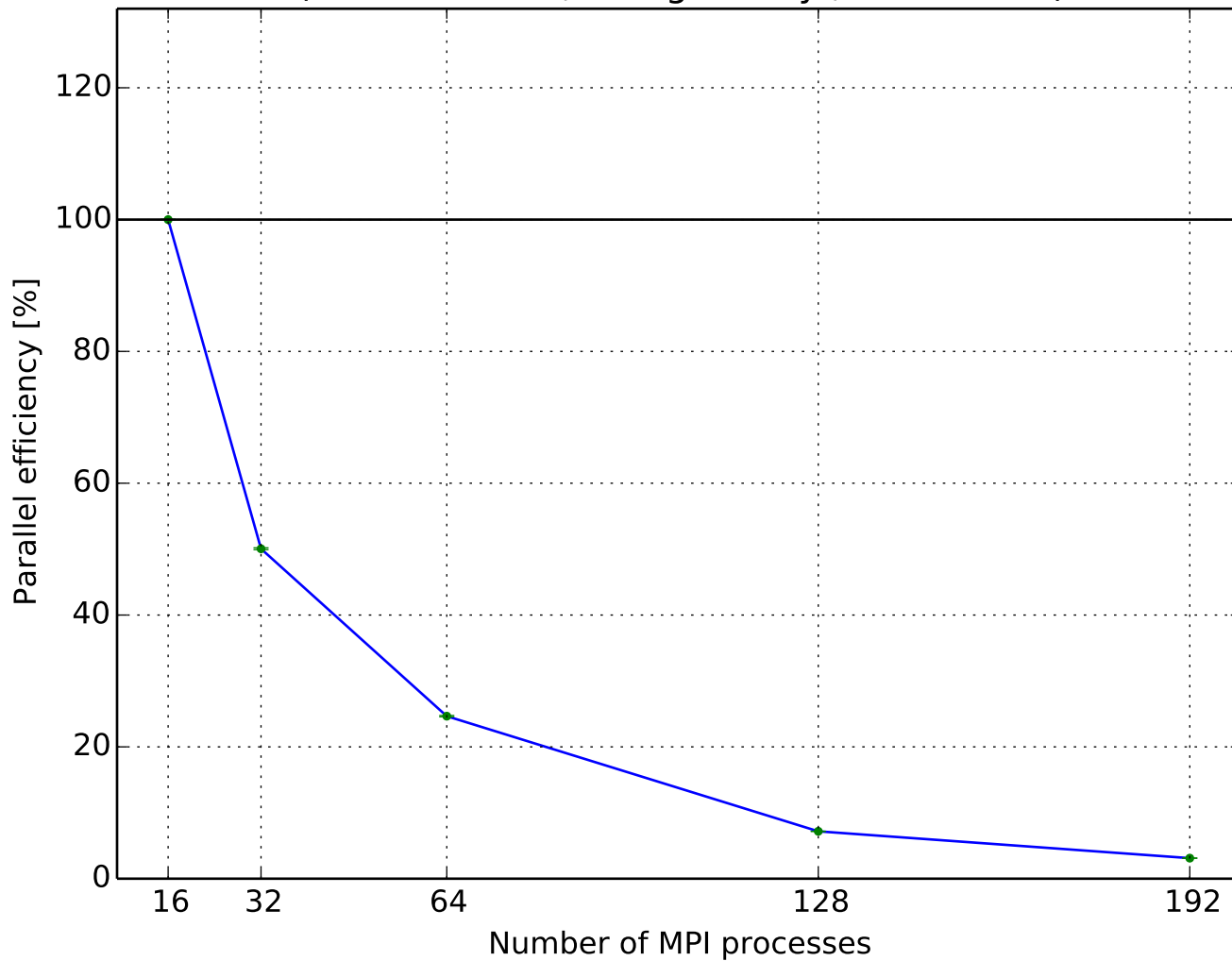
Execution time per time step
(0.3744M cells, Smagorinsky ,GAMG-FDIC)



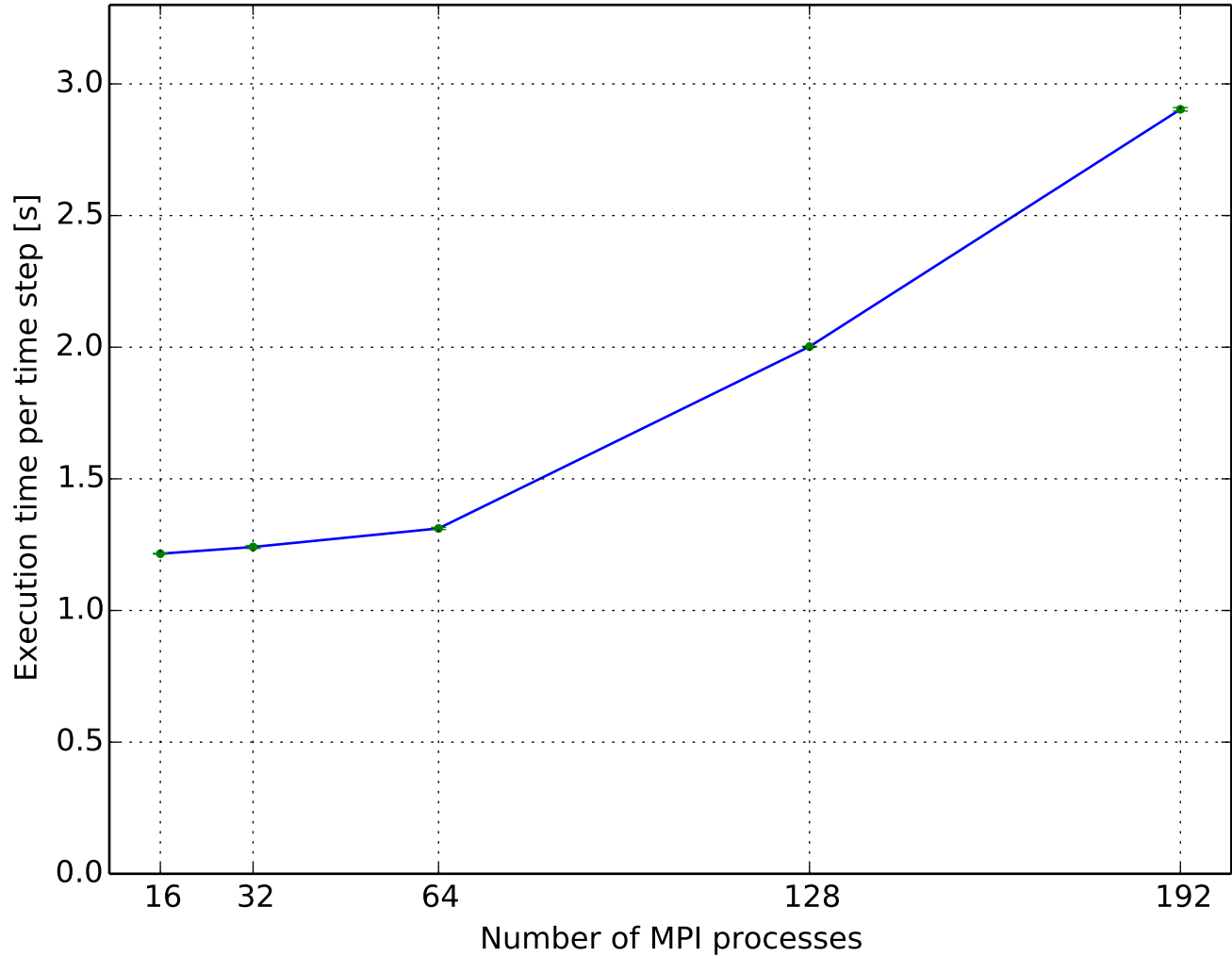
Speedup ratio (0.3744M cells, Smagorinsky ,GAMG-FDIC)



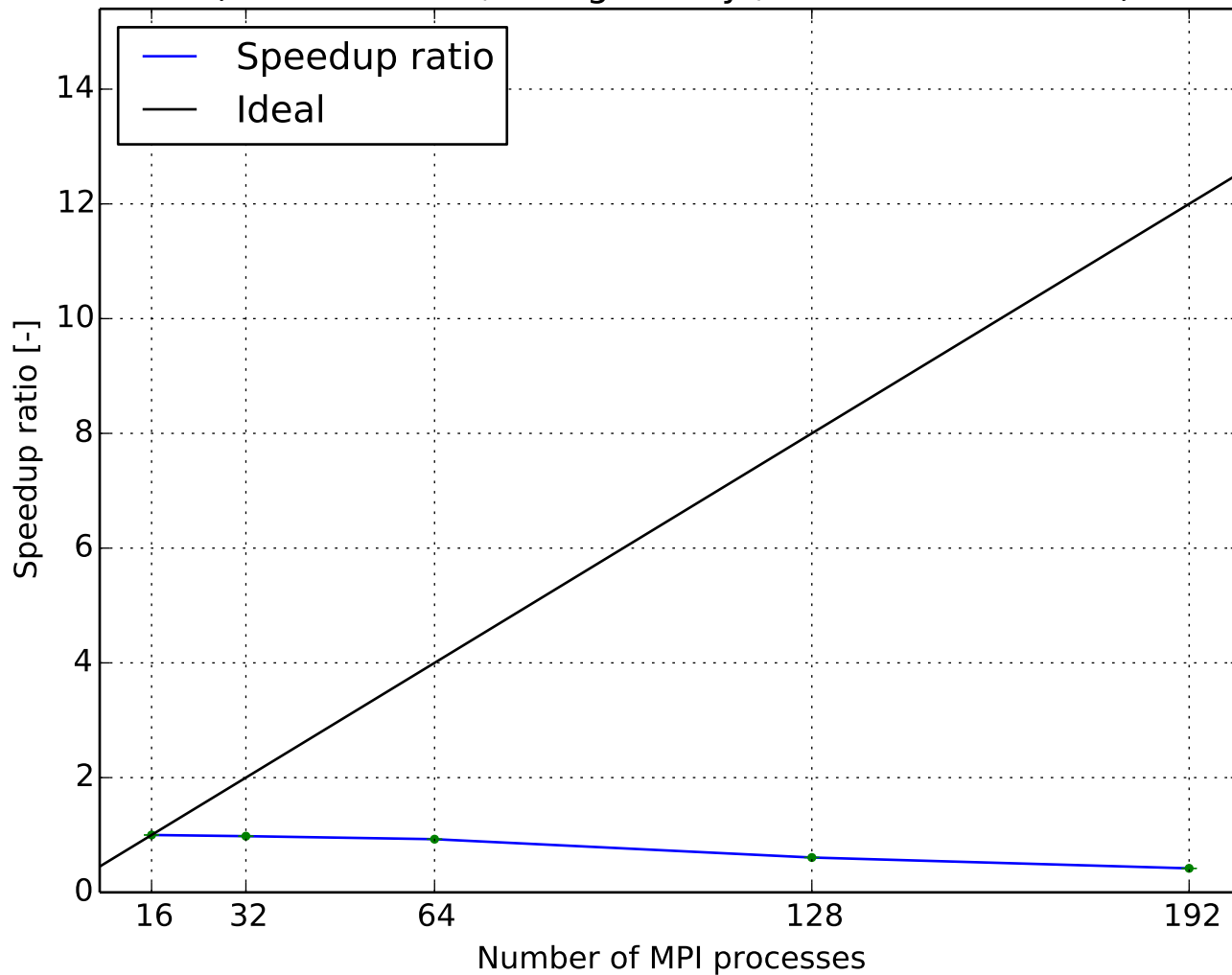
Parallel efficiency
(0.3744M cells, Smagorinsky ,GAMG-FDIC)



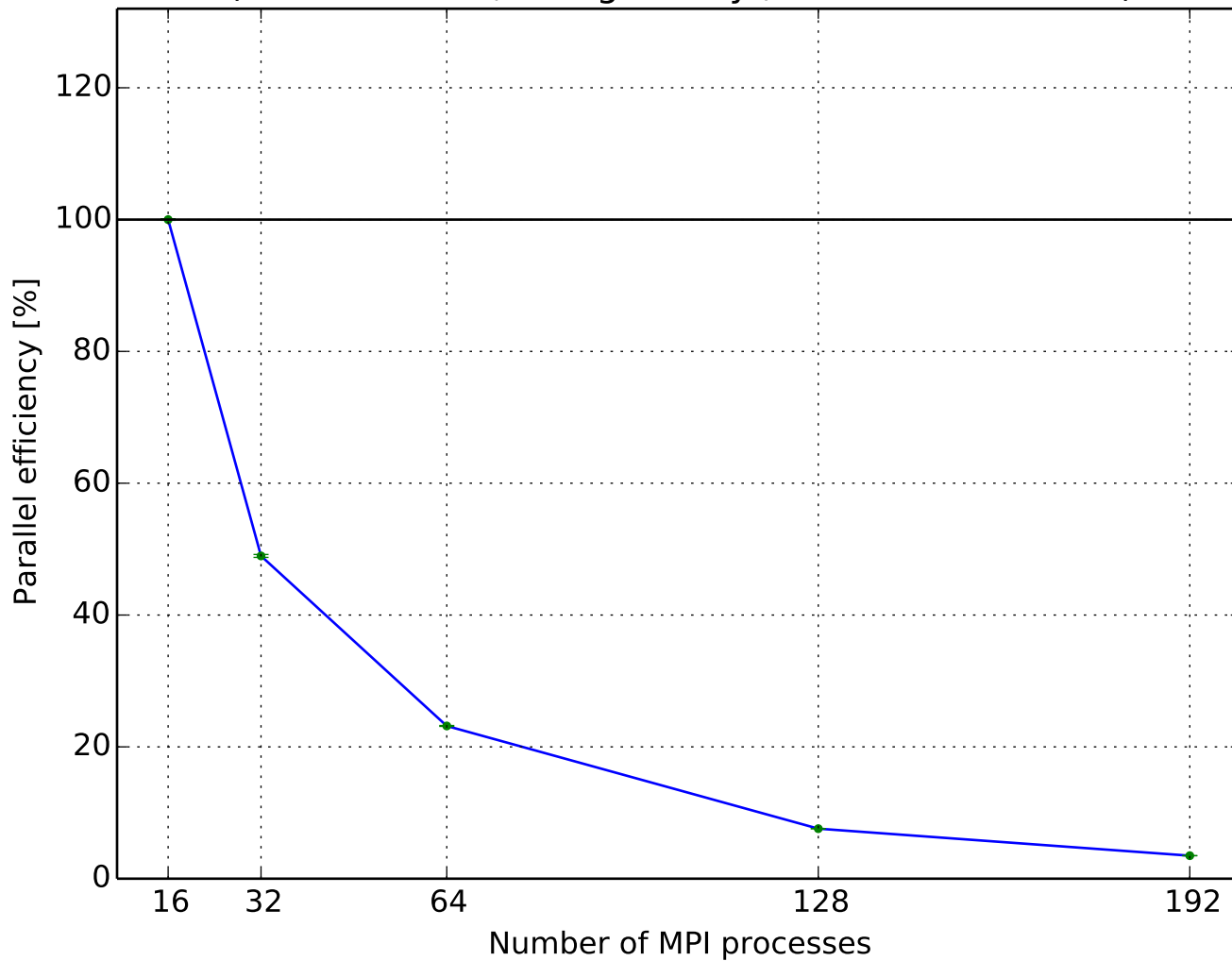
Execution time per time step
(0.3744M cells, Smagorinsky ,GAMG-GaussSeidel)



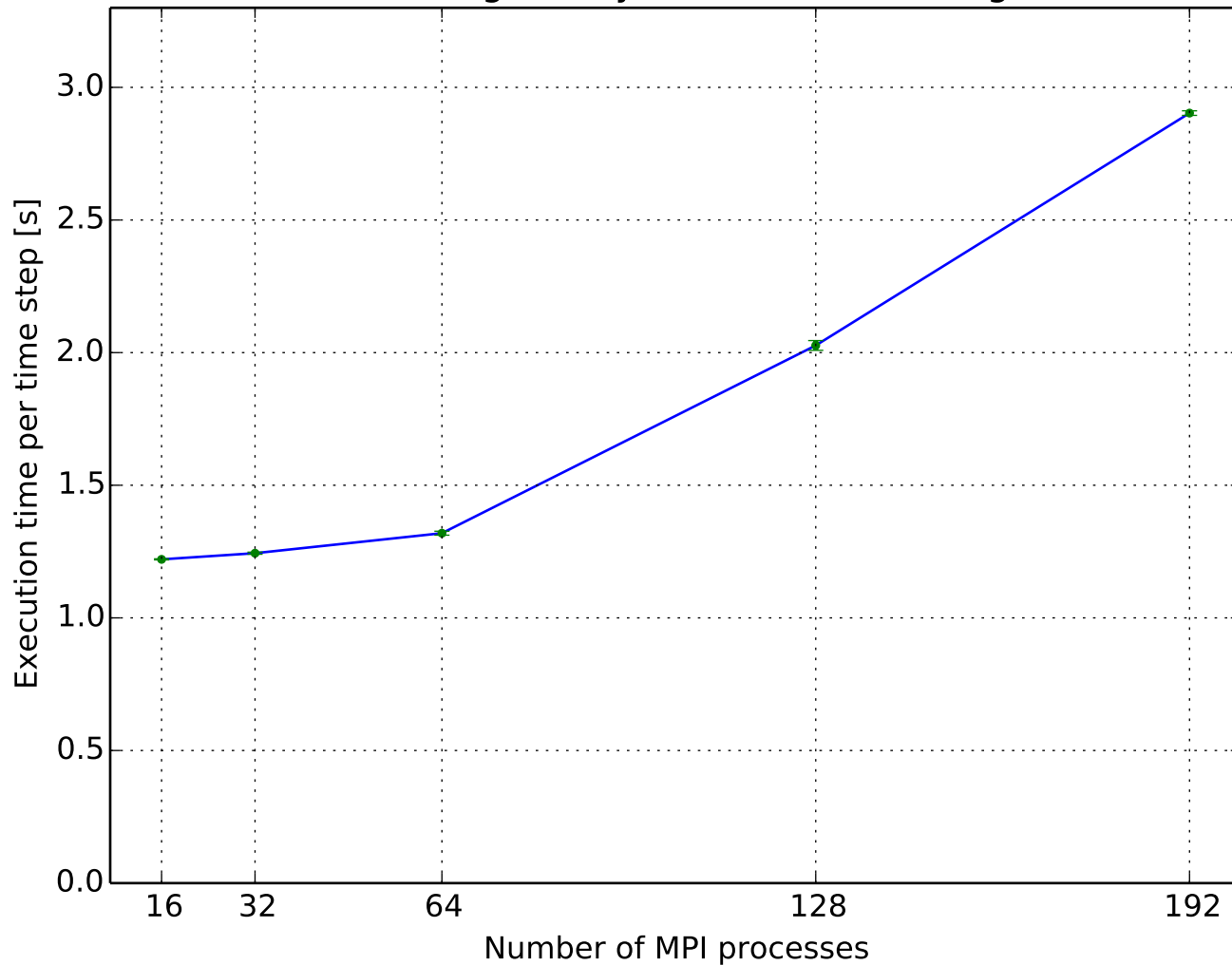
Speedup ratio
(0.3744M cells, Smagorinsky ,GAMG-GaussSeidel)



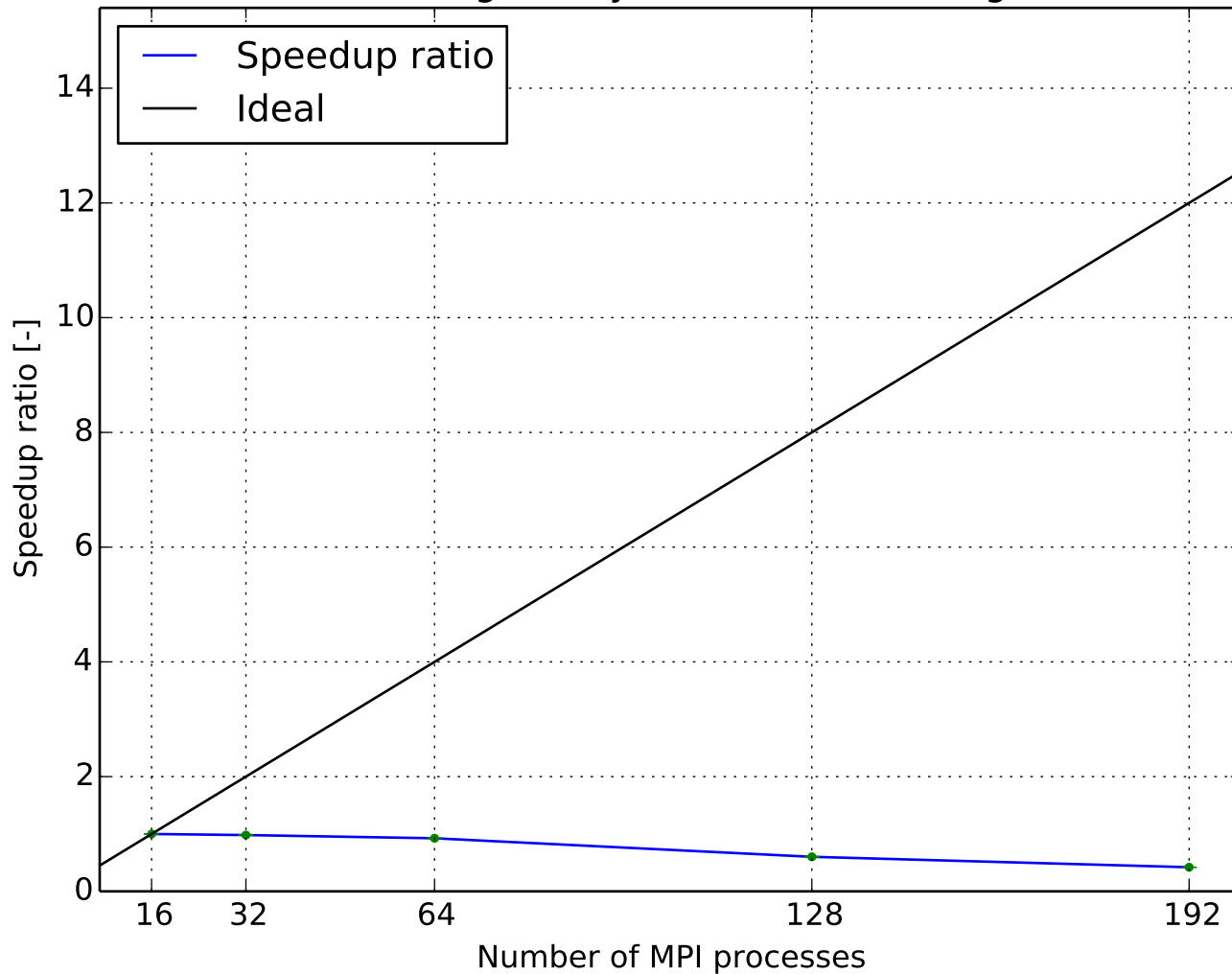
Parallel efficiency
(0.3744M cells, Smagorinsky ,GAMG-GaussSeidel)



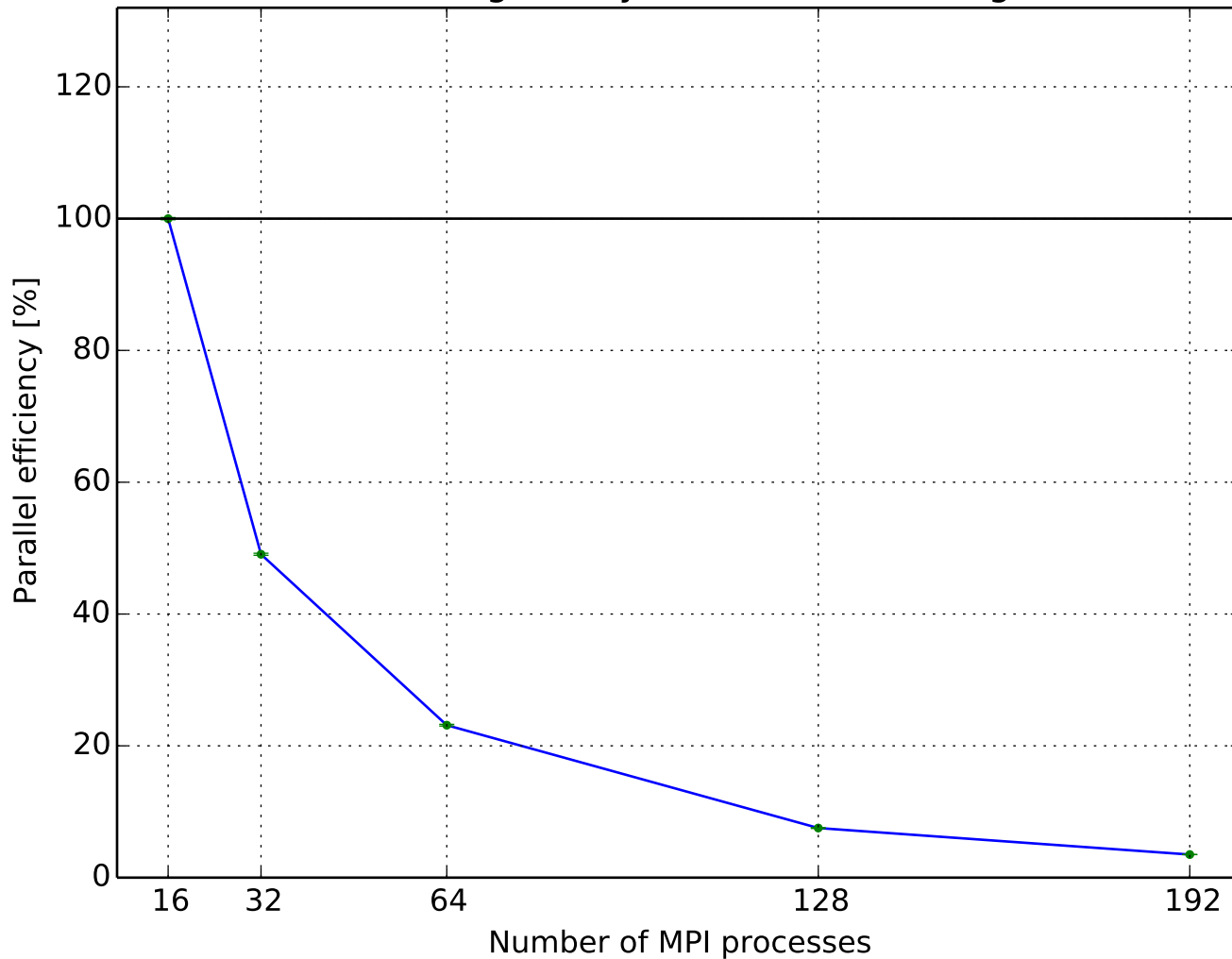
Execution time per time step
(0.3744M cells, Smagorinsky ,GAMG-nonBlockingGaussSeidel)



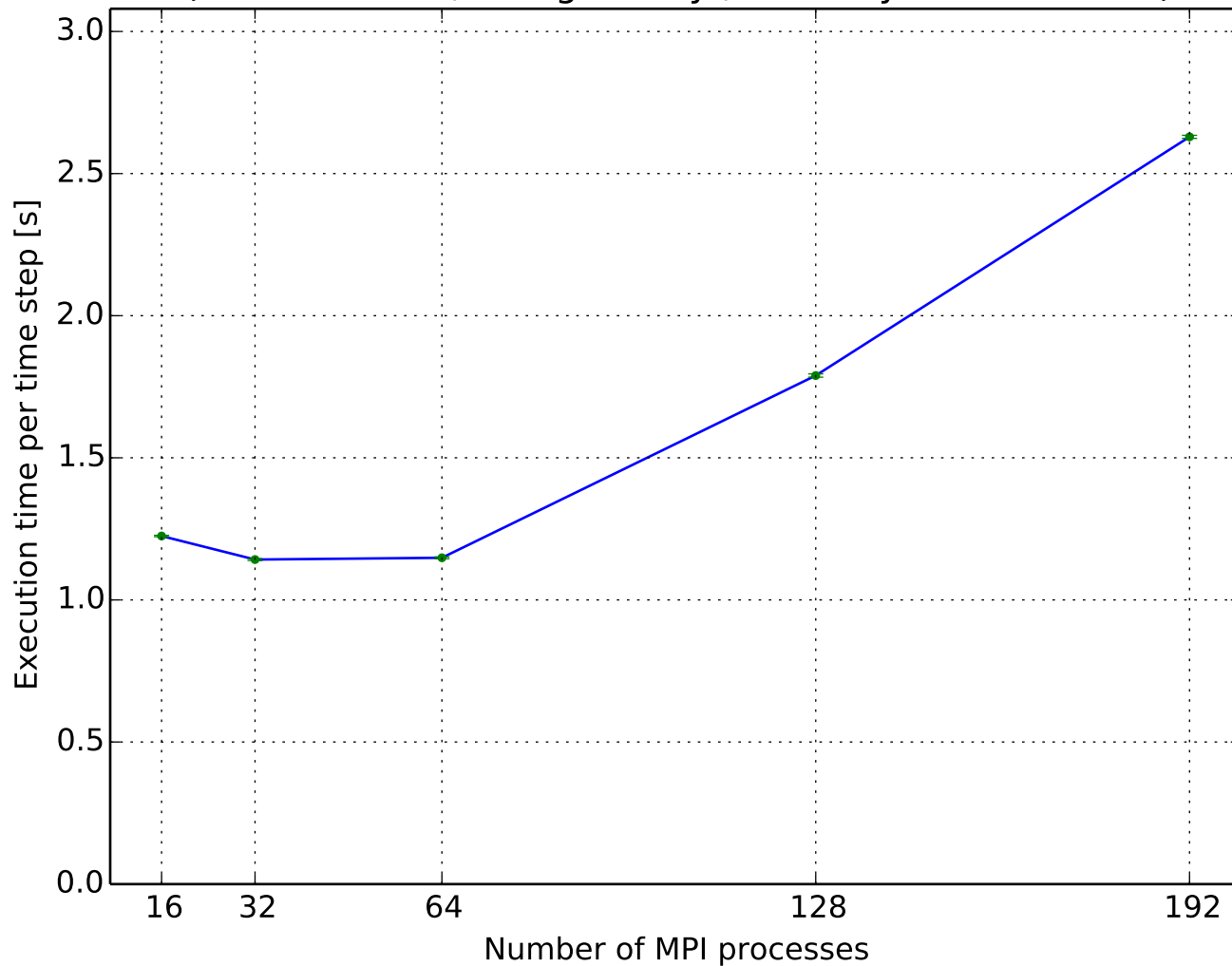
Speedup ratio
(0.3744M cells, Smagorinsky ,GAMG-nonBlockingGaussSeidel)



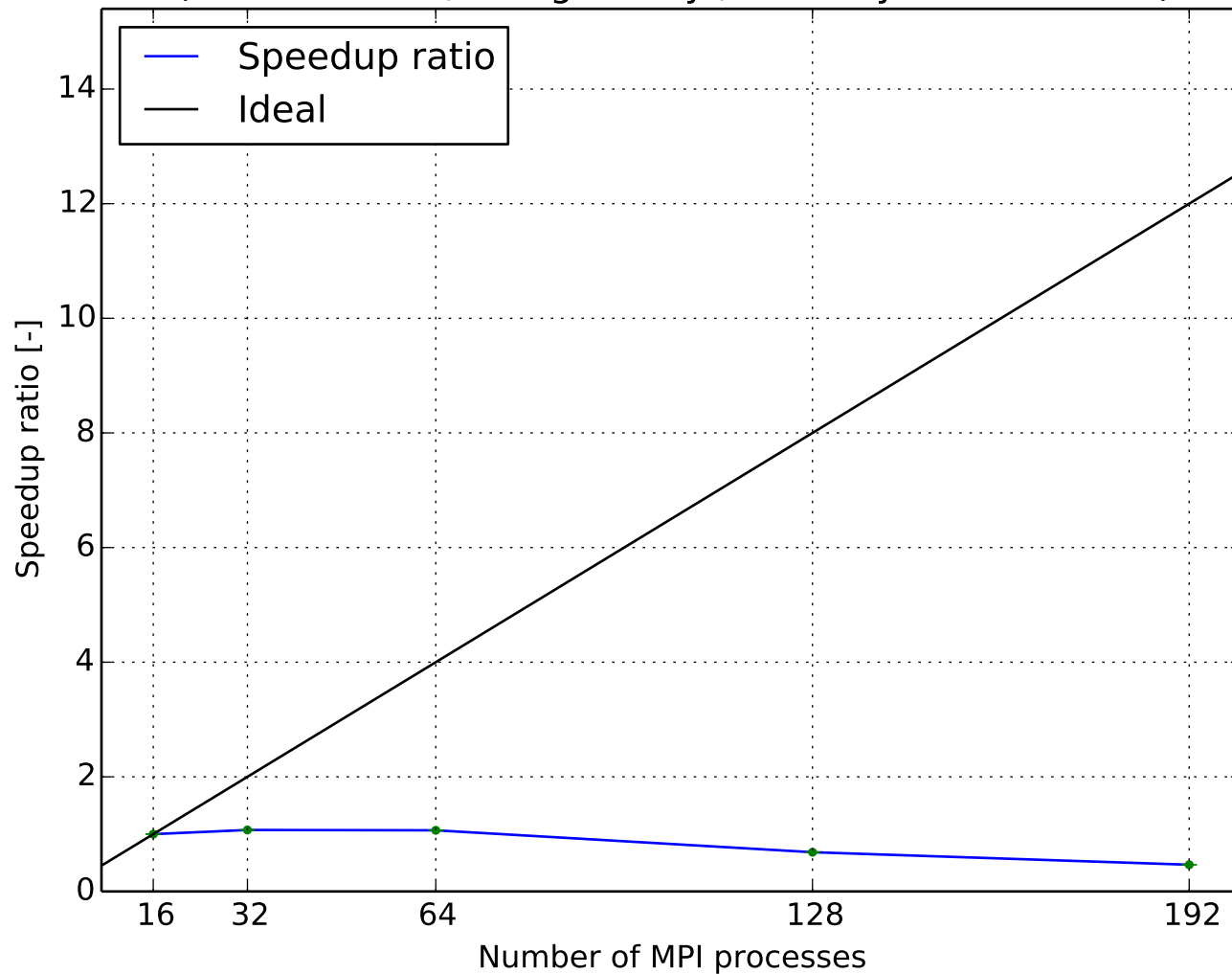
Parallel efficiency
(0.3744M cells, Smagorinsky ,GAMG-nonBlockingGaussSeidel)



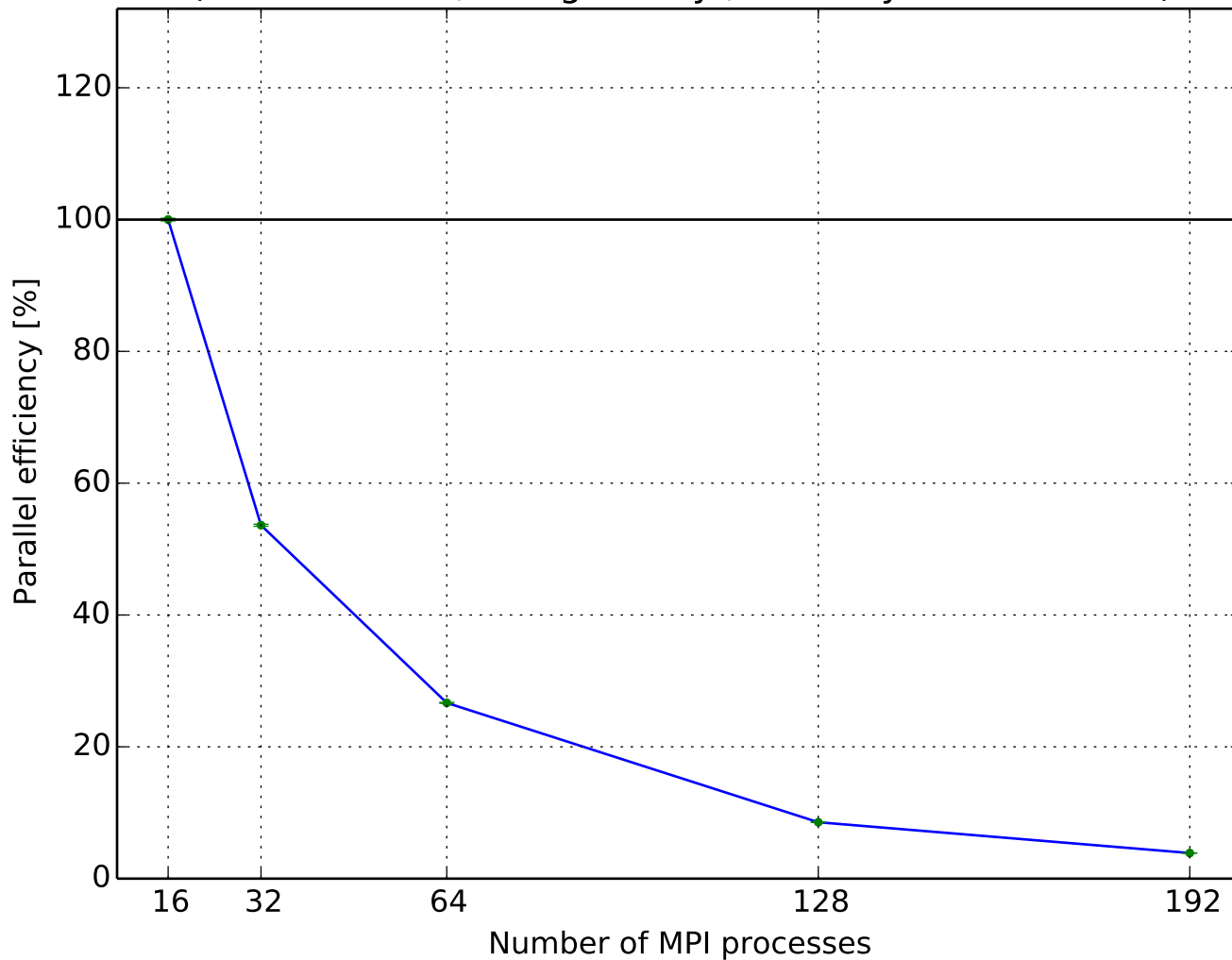
Execution time per time step
(0.3744M cells, Smagorinsky ,GAMG-symGaussSeidel)



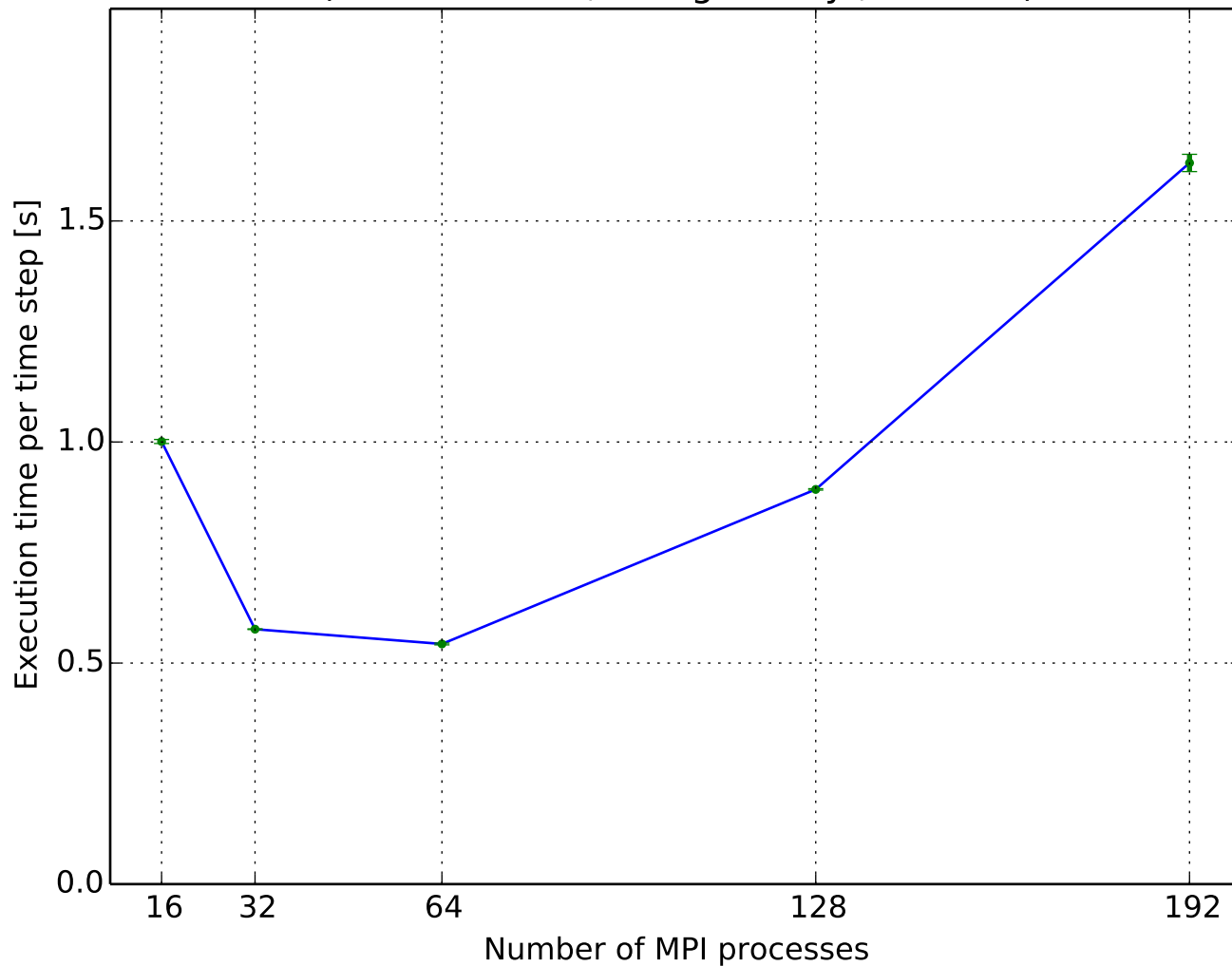
Speedup ratio
(0.3744M cells, Smagorinsky ,GAMG-symGaussSeidel)



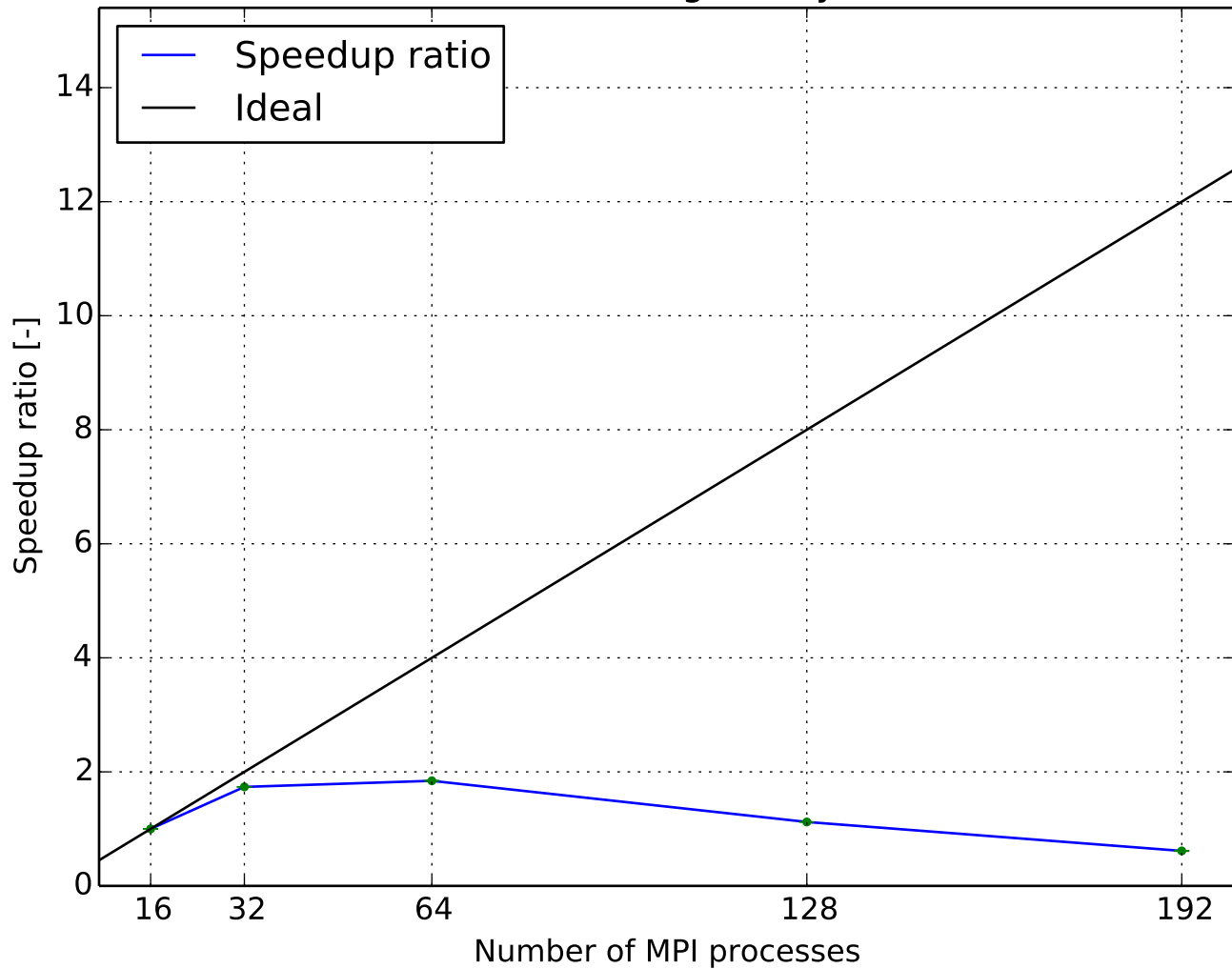
Parallel efficiency
(0.3744M cells, Smagorinsky ,GAMG-symGaussSeidel)



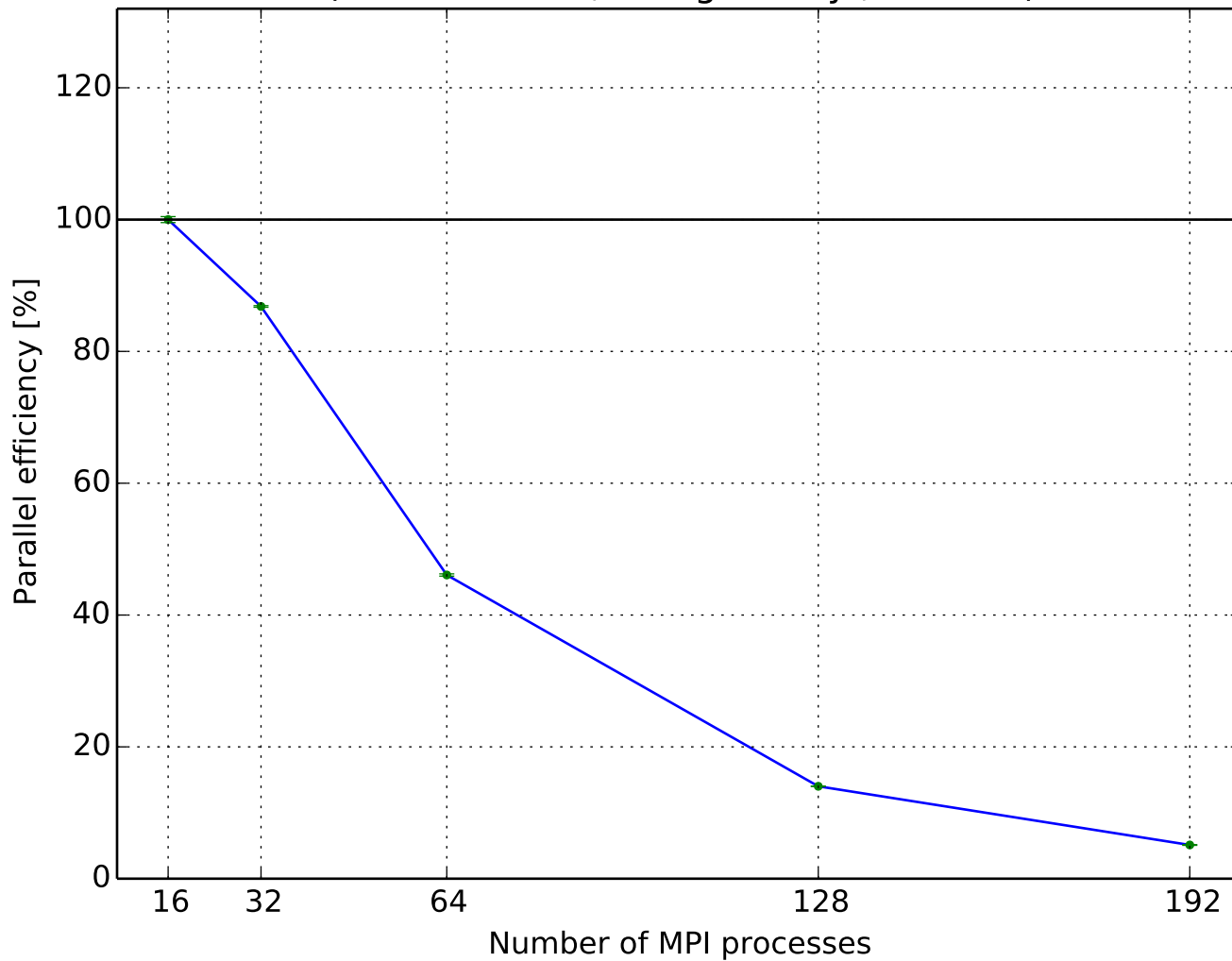
Execution time per time step
(0.3744M cells, Smagorinsky ,PCG-DIC)



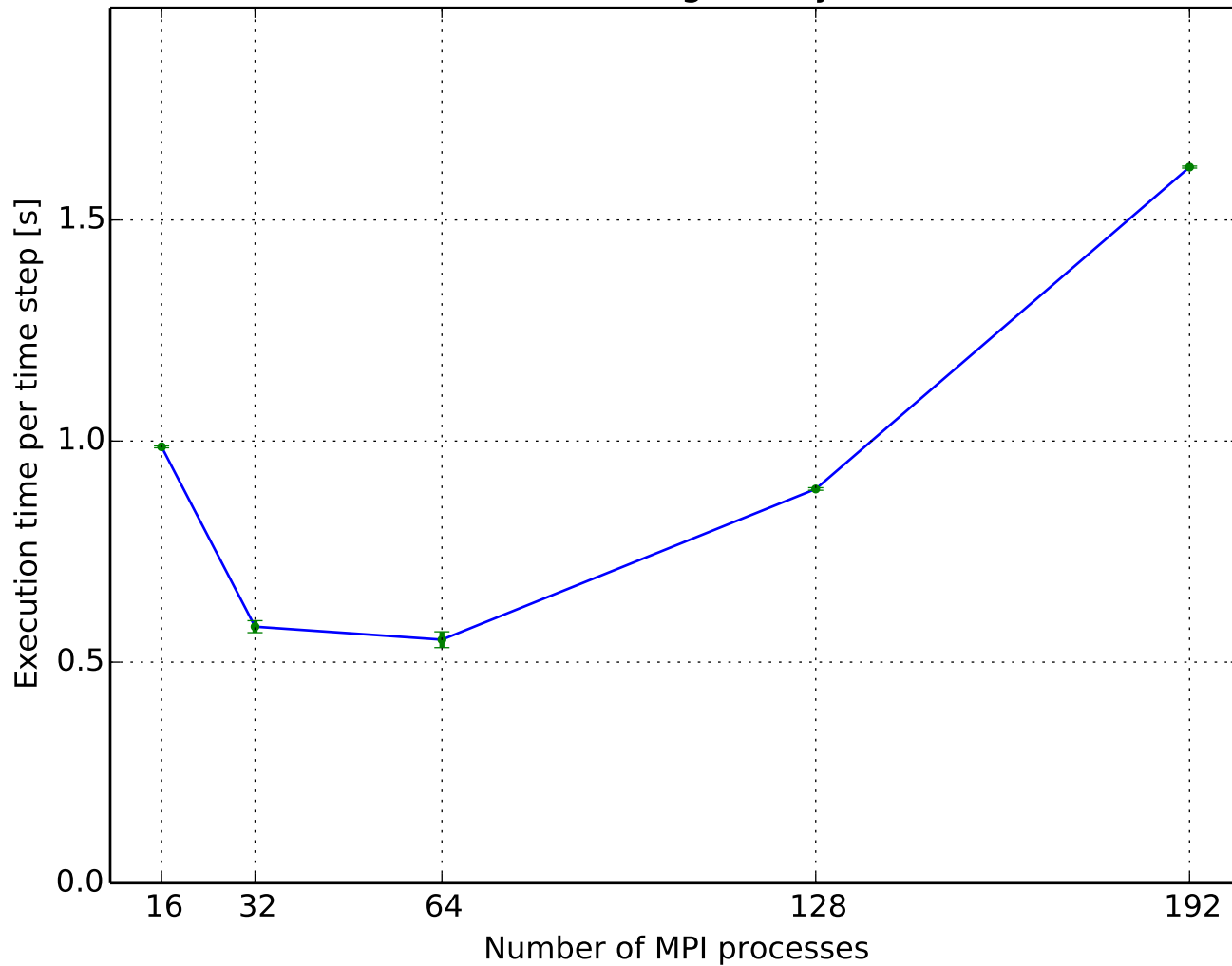
Speedup ratio
(0.3744M cells, Smagorinsky ,PCG-DIC)



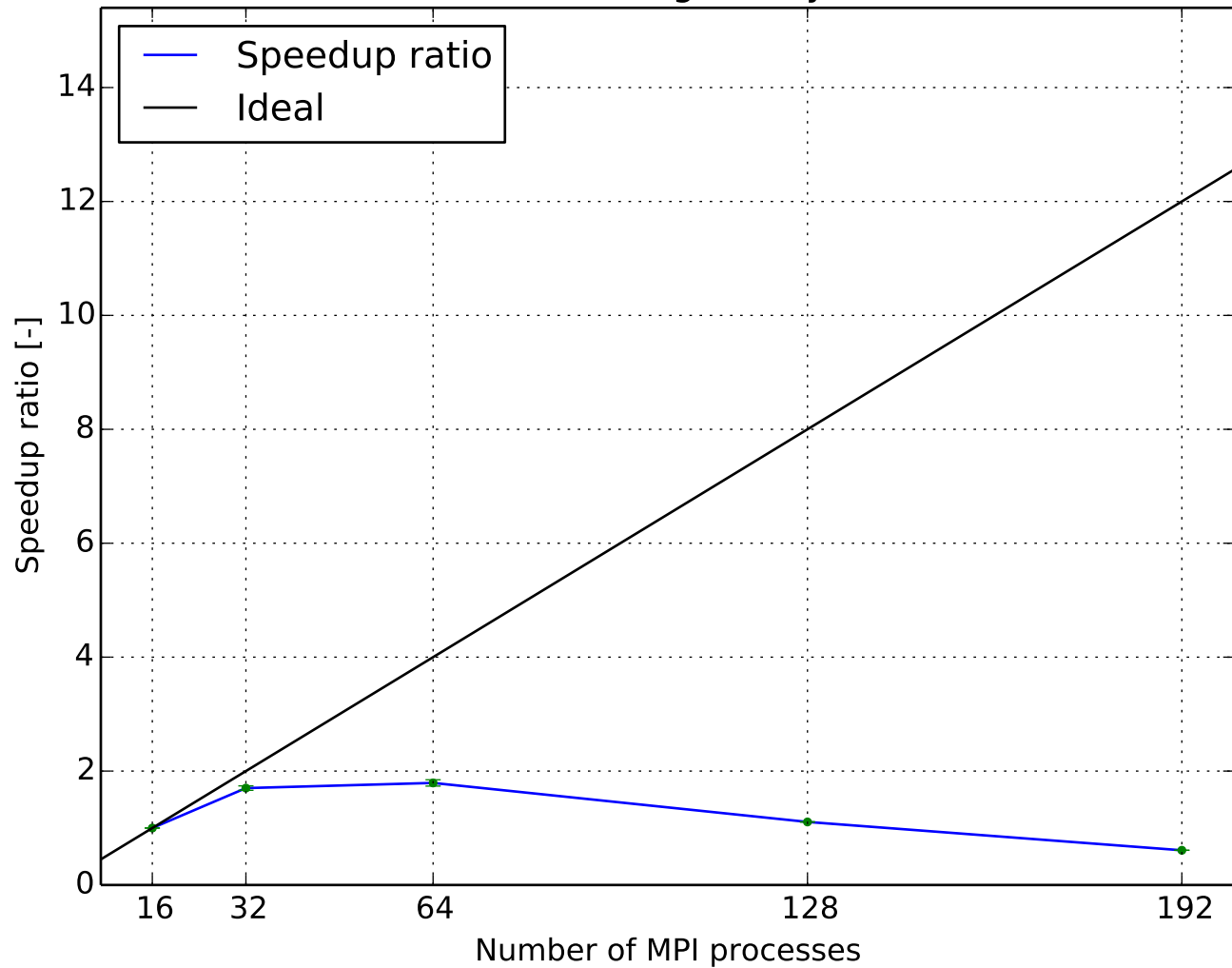
Parallel efficiency
(0.3744M cells, Smagorinsky ,PCG-DIC)



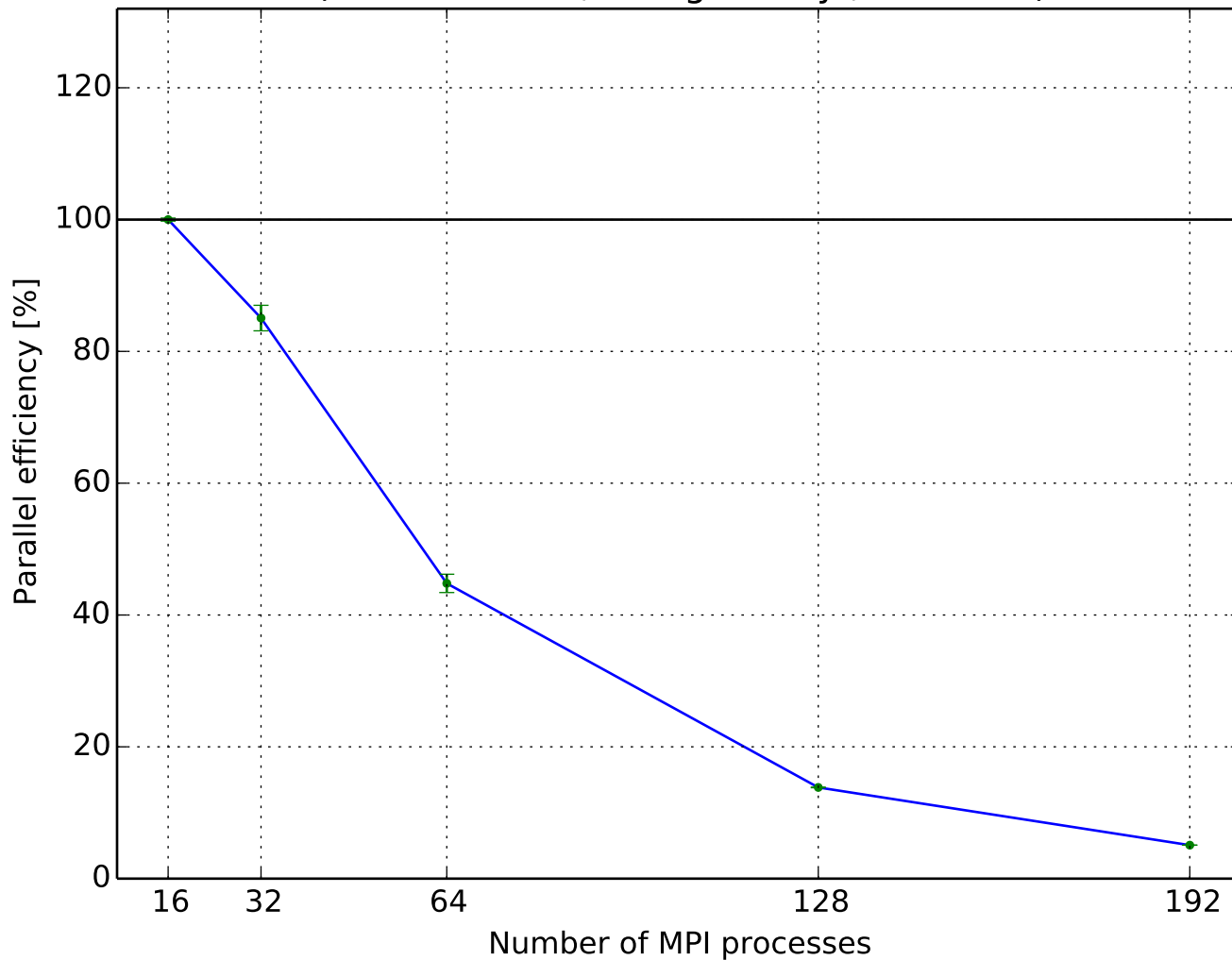
Execution time per time step
(0.3744M cells, Smagorinsky ,PCG-FDIC)



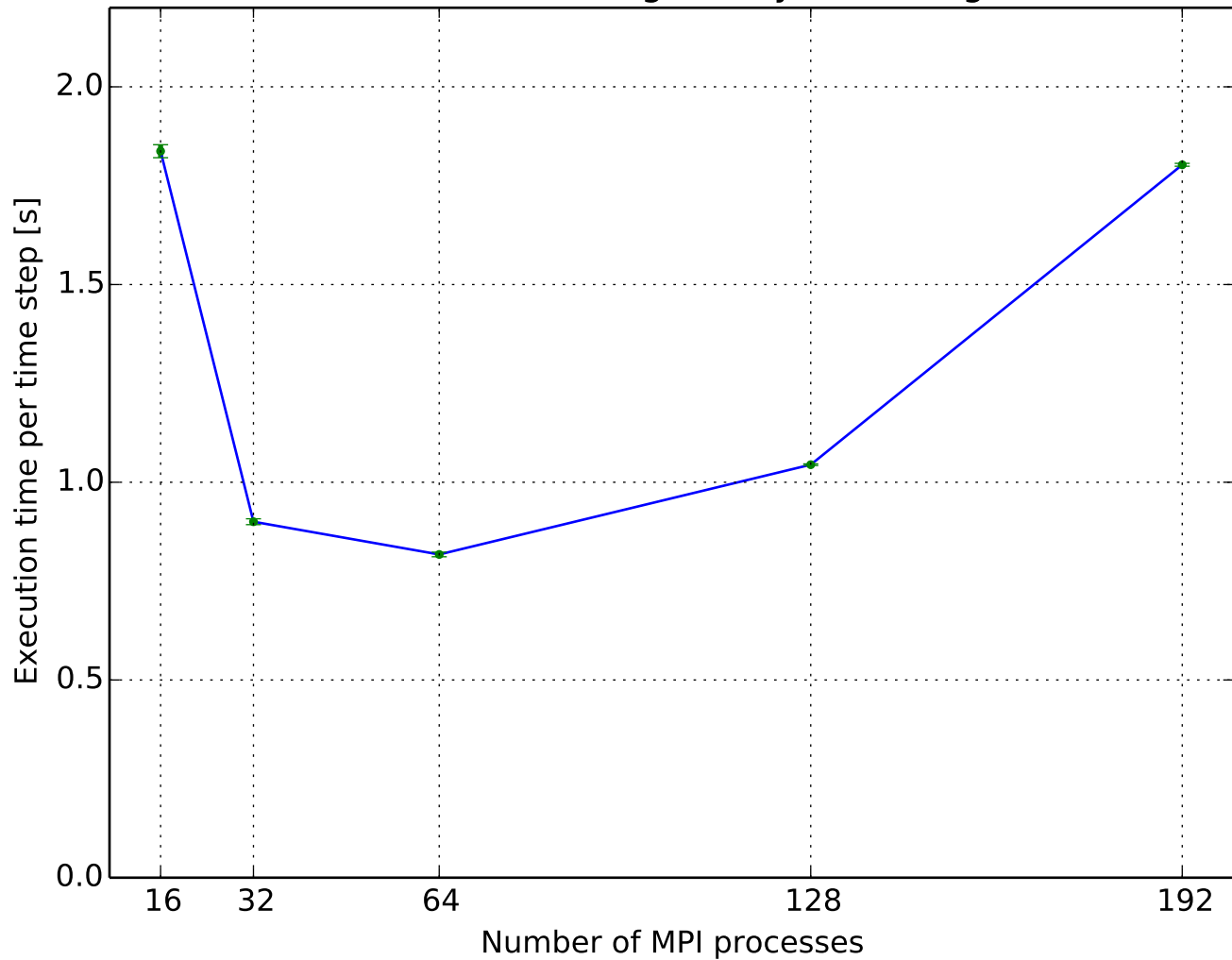
Speedup ratio
(0.3744M cells, Smagorinsky ,PCG-FDIC)



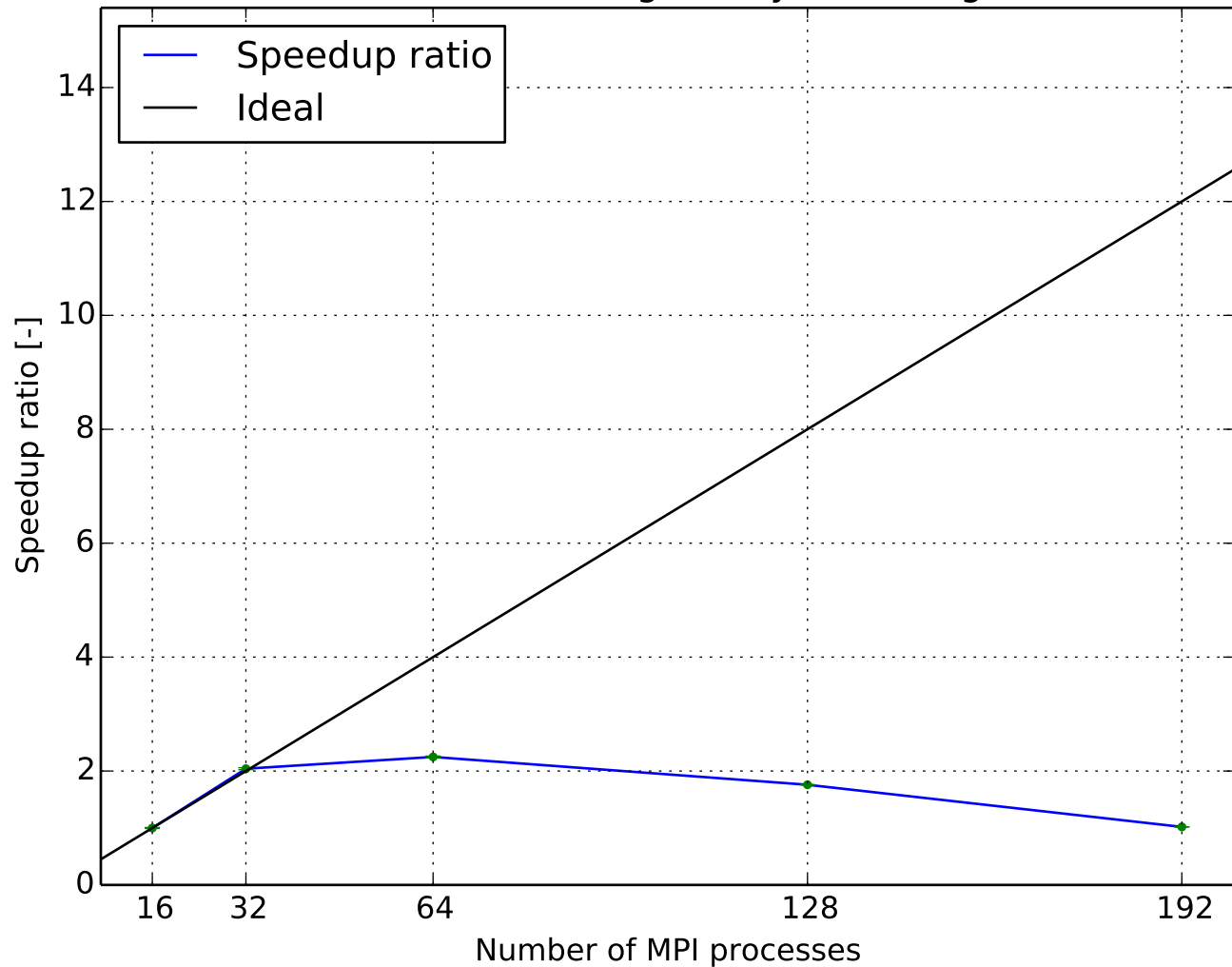
Parallel efficiency
(0.3744M cells, Smagorinsky ,PCG-FDIC)



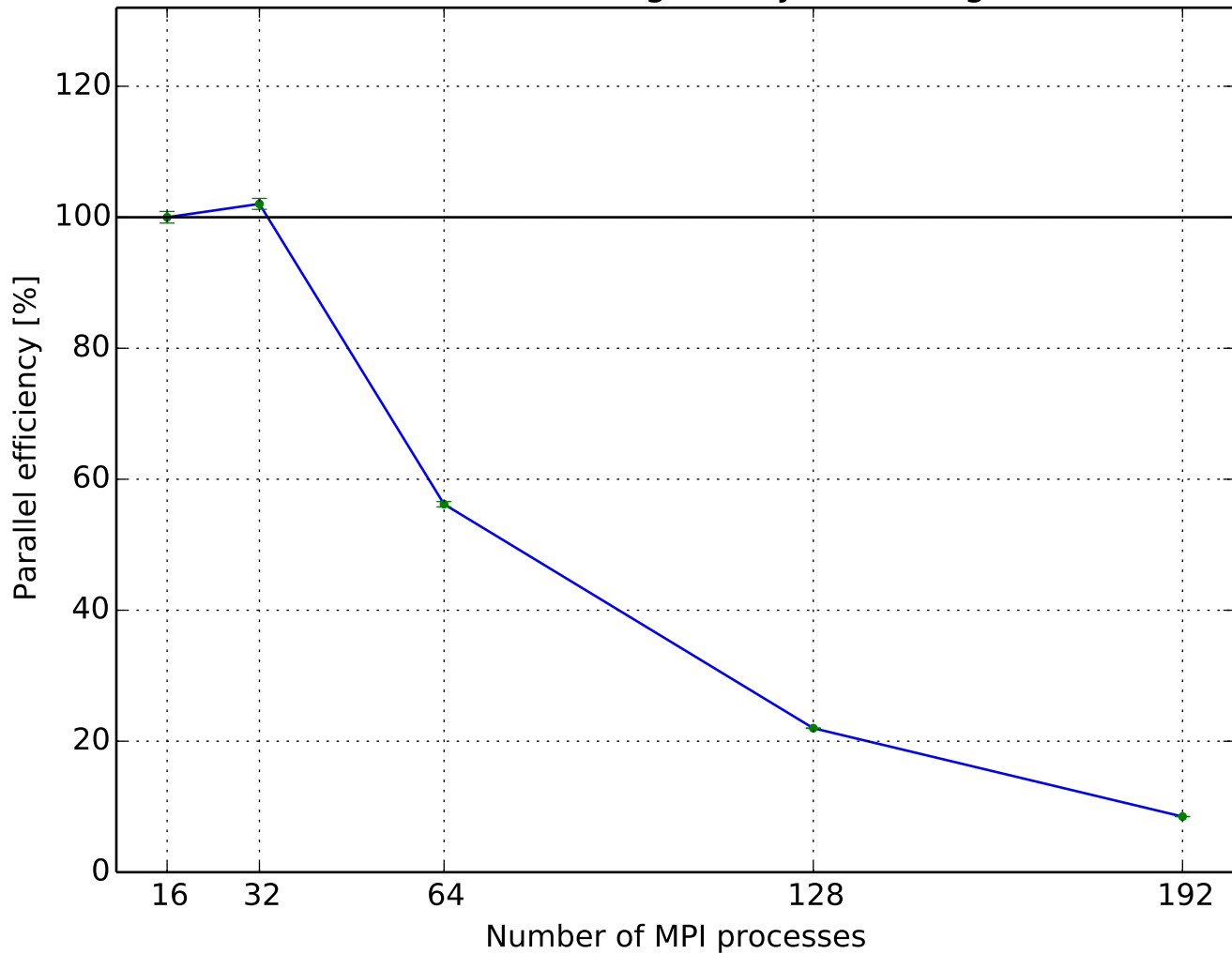
Execution time per time step
(0.3744M cells, Smagorinsky ,PCG-diagonal)



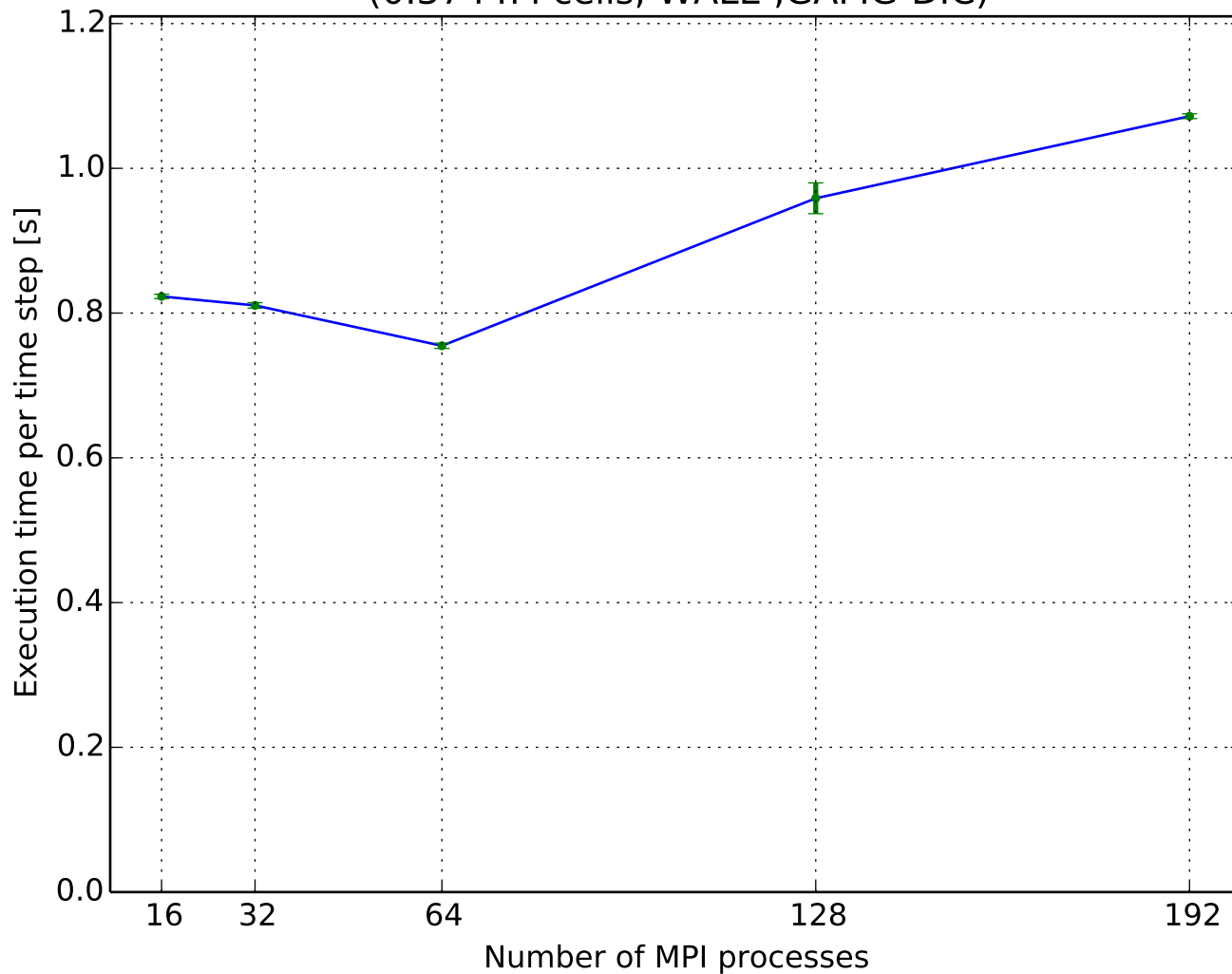
Speedup ratio
(0.3744M cells, Smagorinsky ,PCG-diagonal)



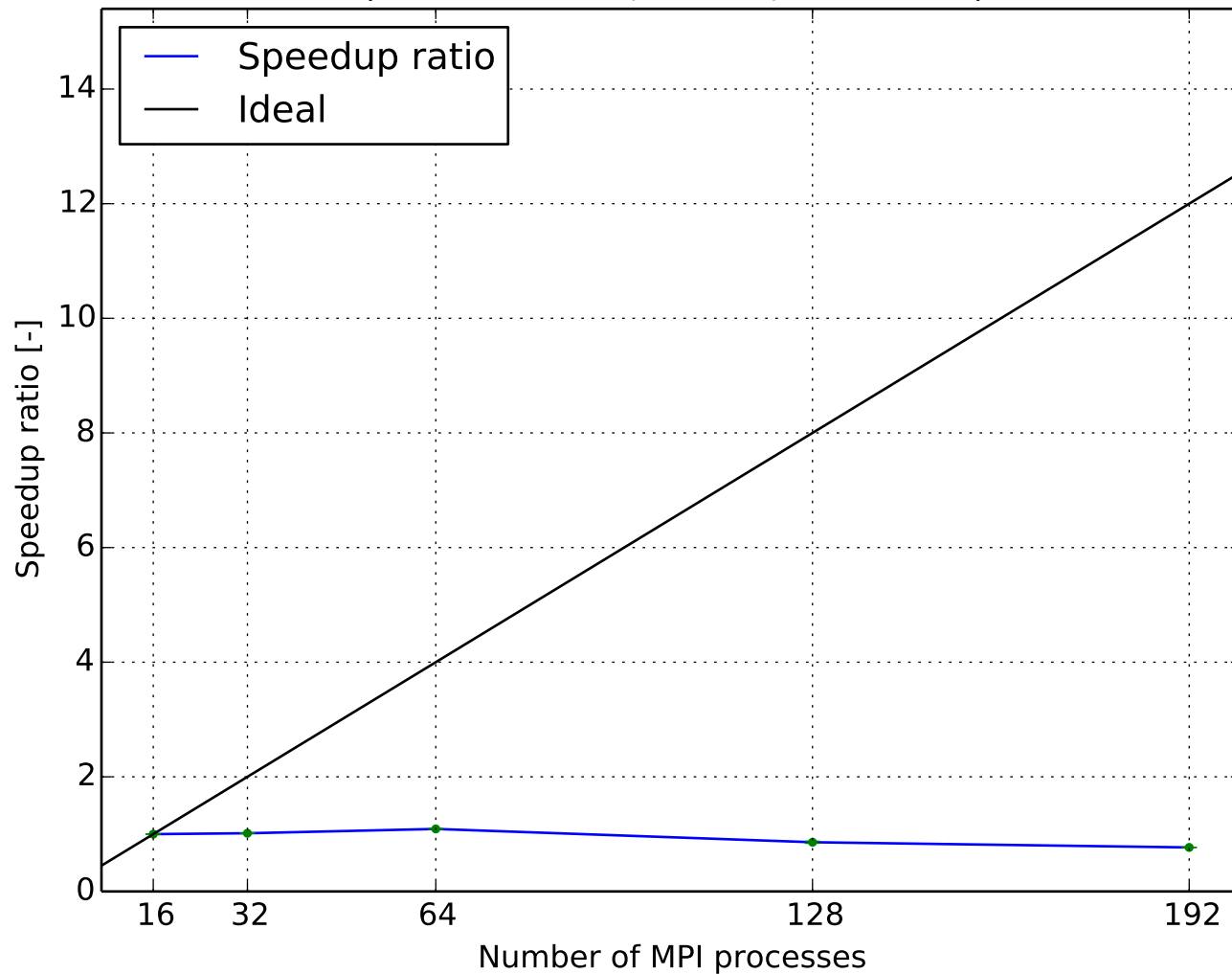
Parallel efficiency
(0.3744M cells, Smagorinsky ,PCG-diagonal)



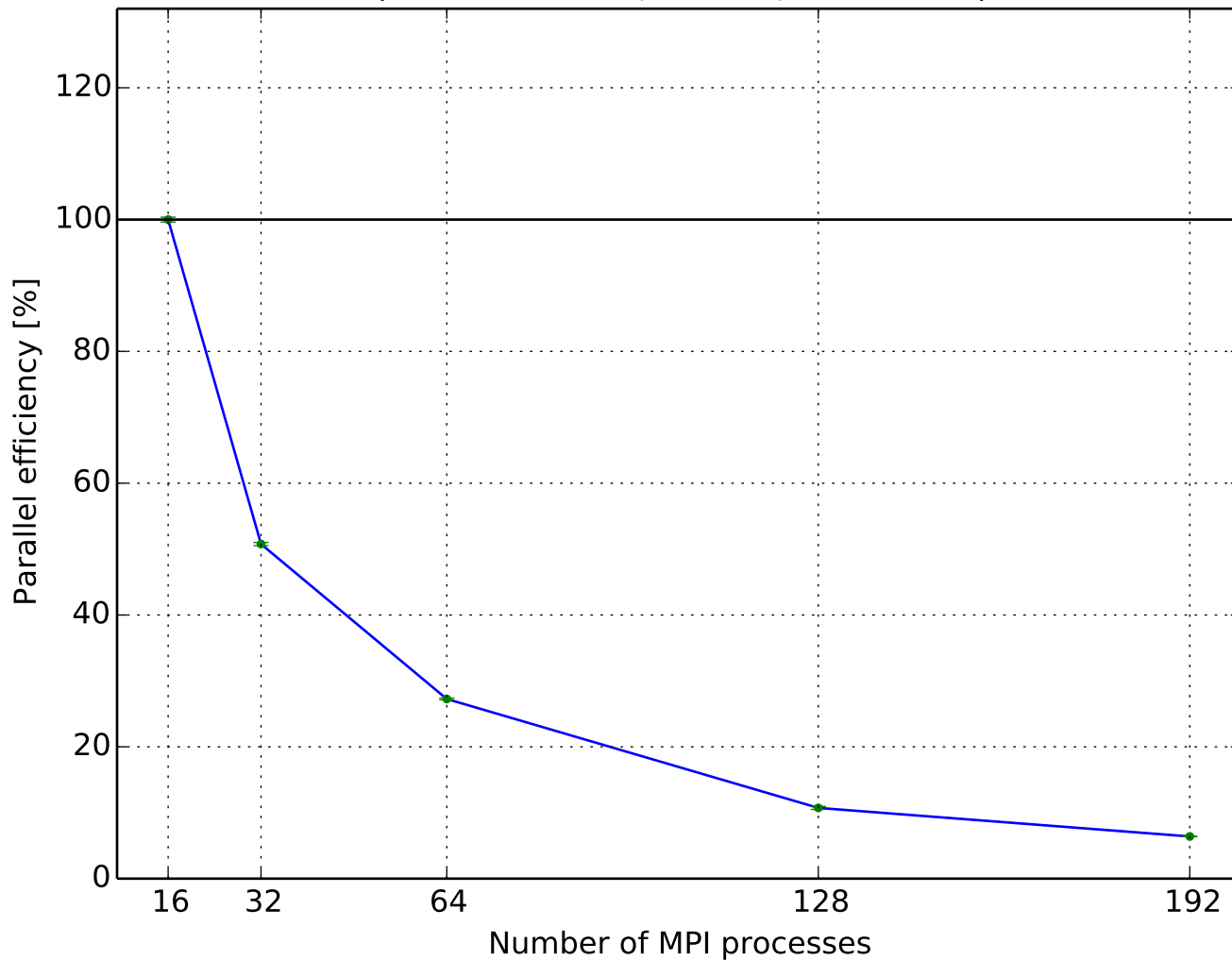
Execution time per time step
(0.3744M cells, WALE ,GAMG-DIC)



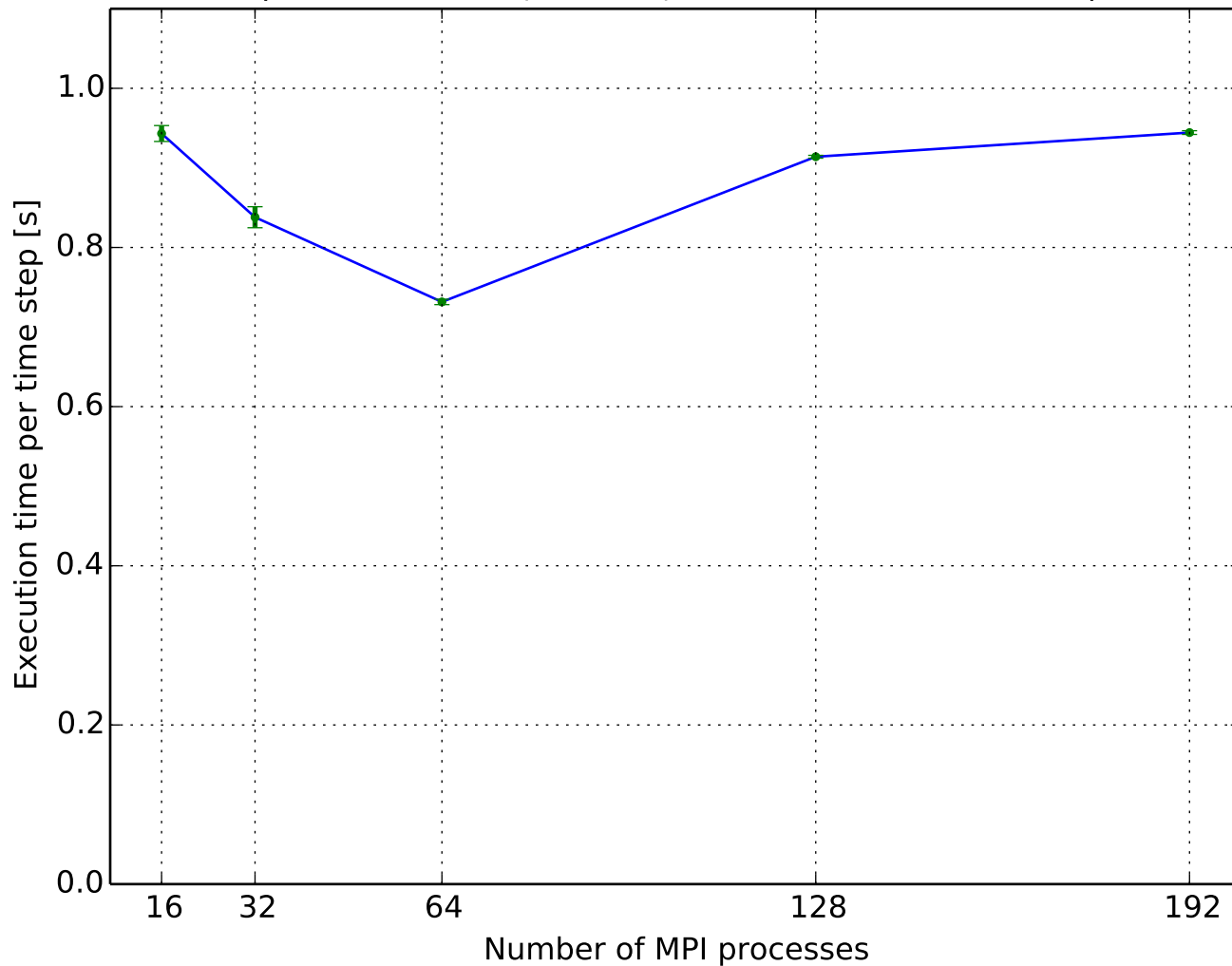
Speedup ratio
(0.3744M cells, WALE ,GAMG-DIC)



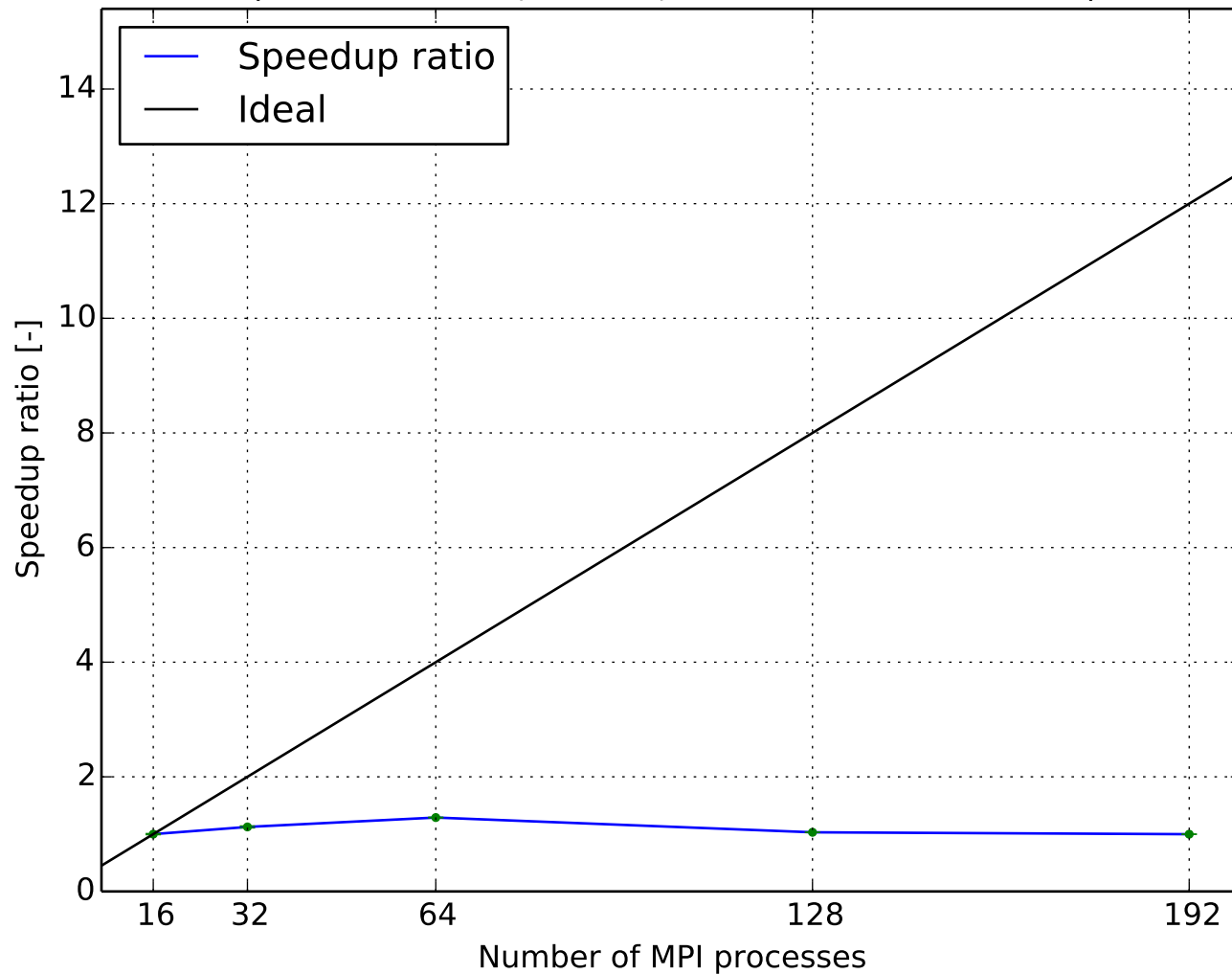
Parallel efficiency
(0.3744M cells, WALE ,GAMG-DIC)



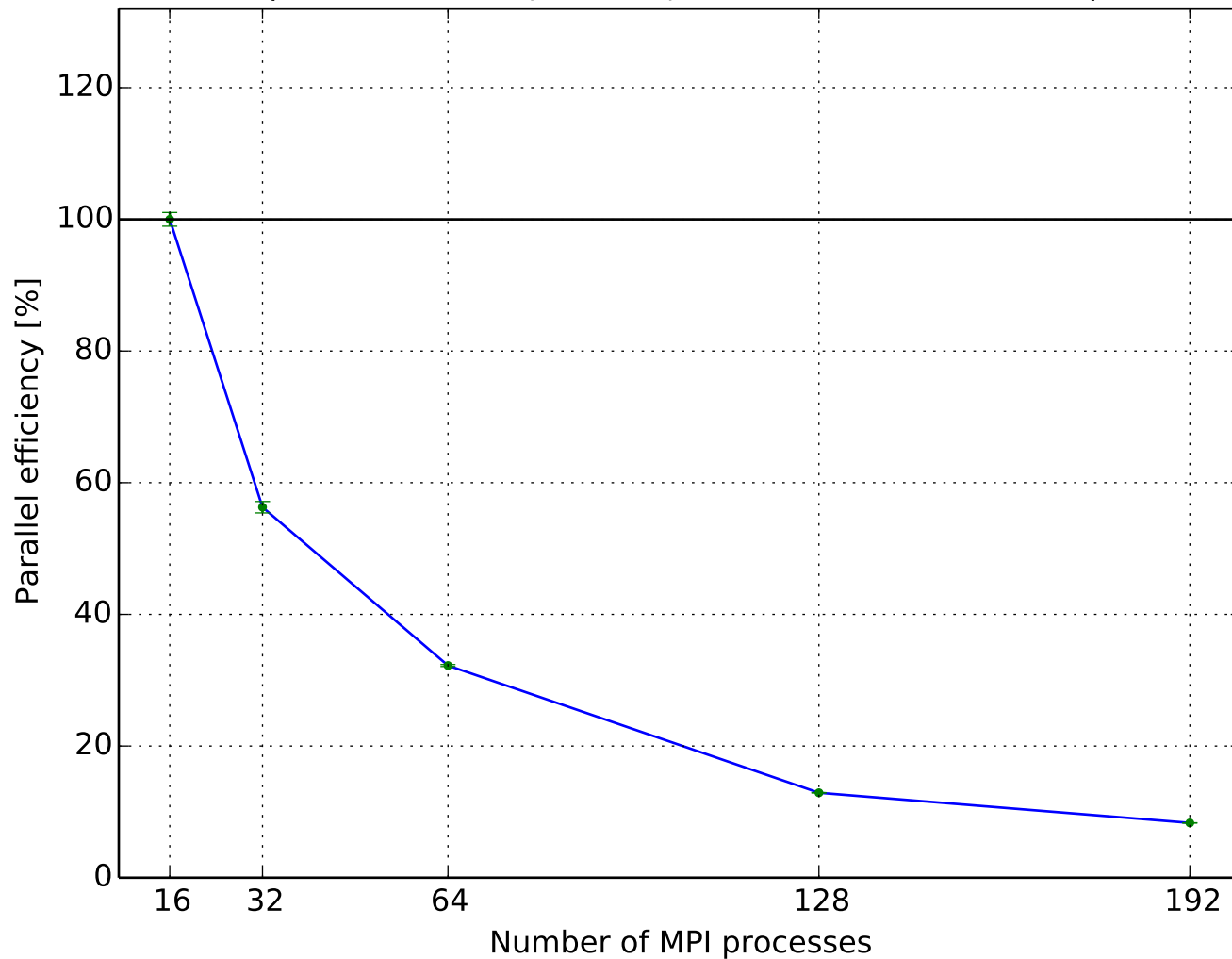
Execution time per time step
(0.3744M cells, WALE ,GAMG-DICGaussSeidel)



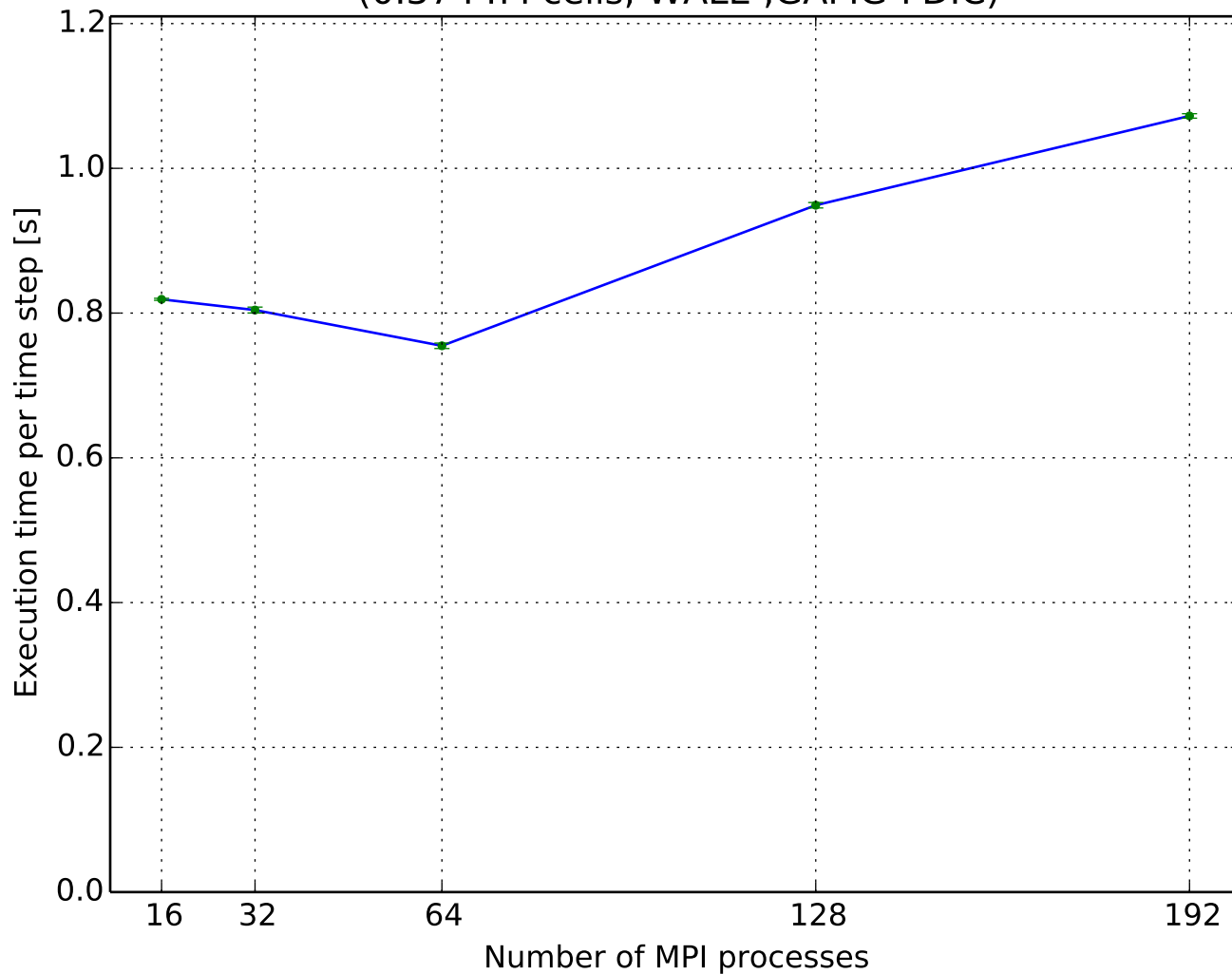
Speedup ratio
(0.3744M cells, WALE ,GAMG-DICGaussSeidel)



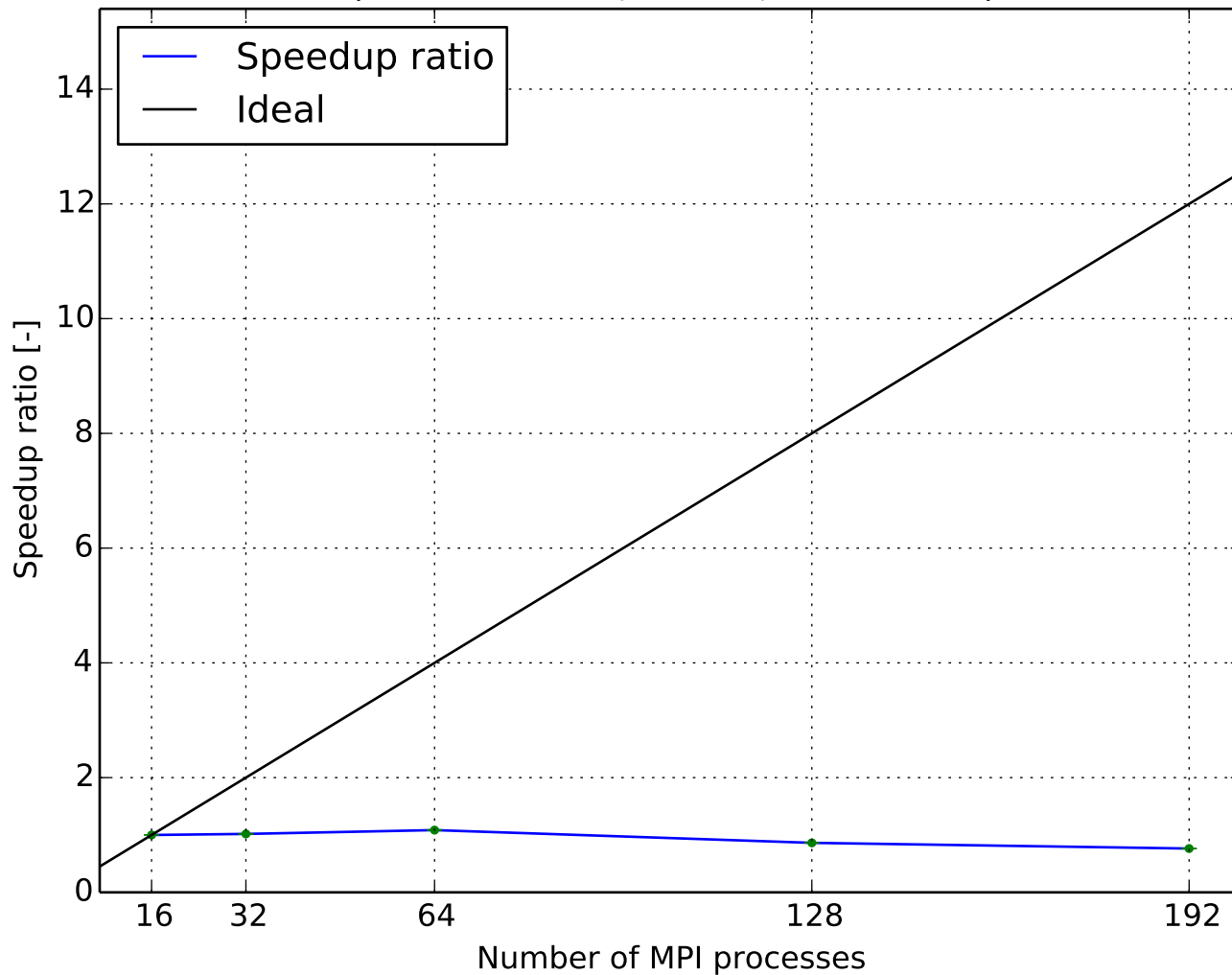
Parallel efficiency
(0.3744M cells, WALE ,GAMG-DICGaussSeidel)



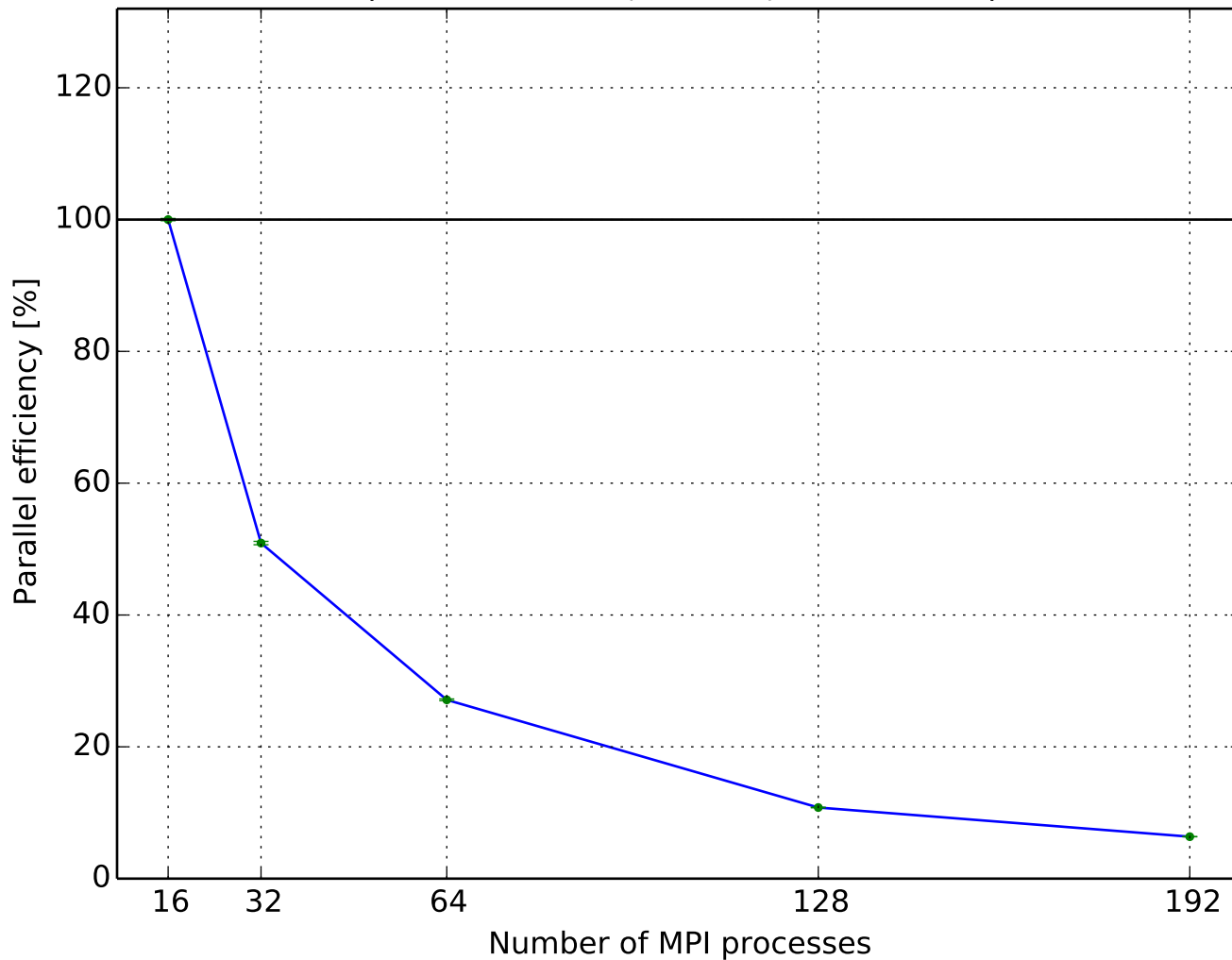
Execution time per time step
(0.3744M cells, WALE ,GAMG-FDIC)



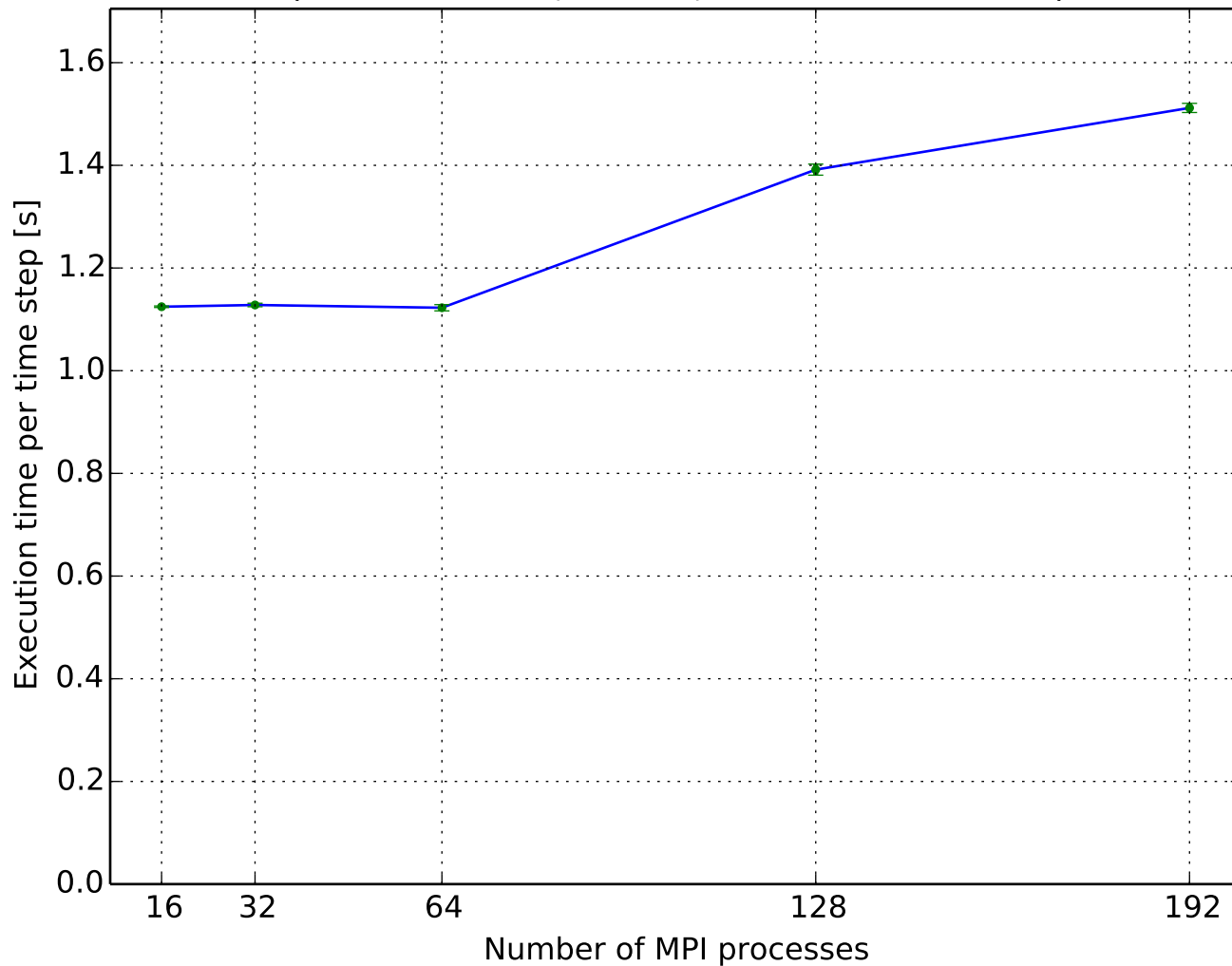
Speedup ratio
(0.3744M cells, WALE ,GAMG-FDIC)



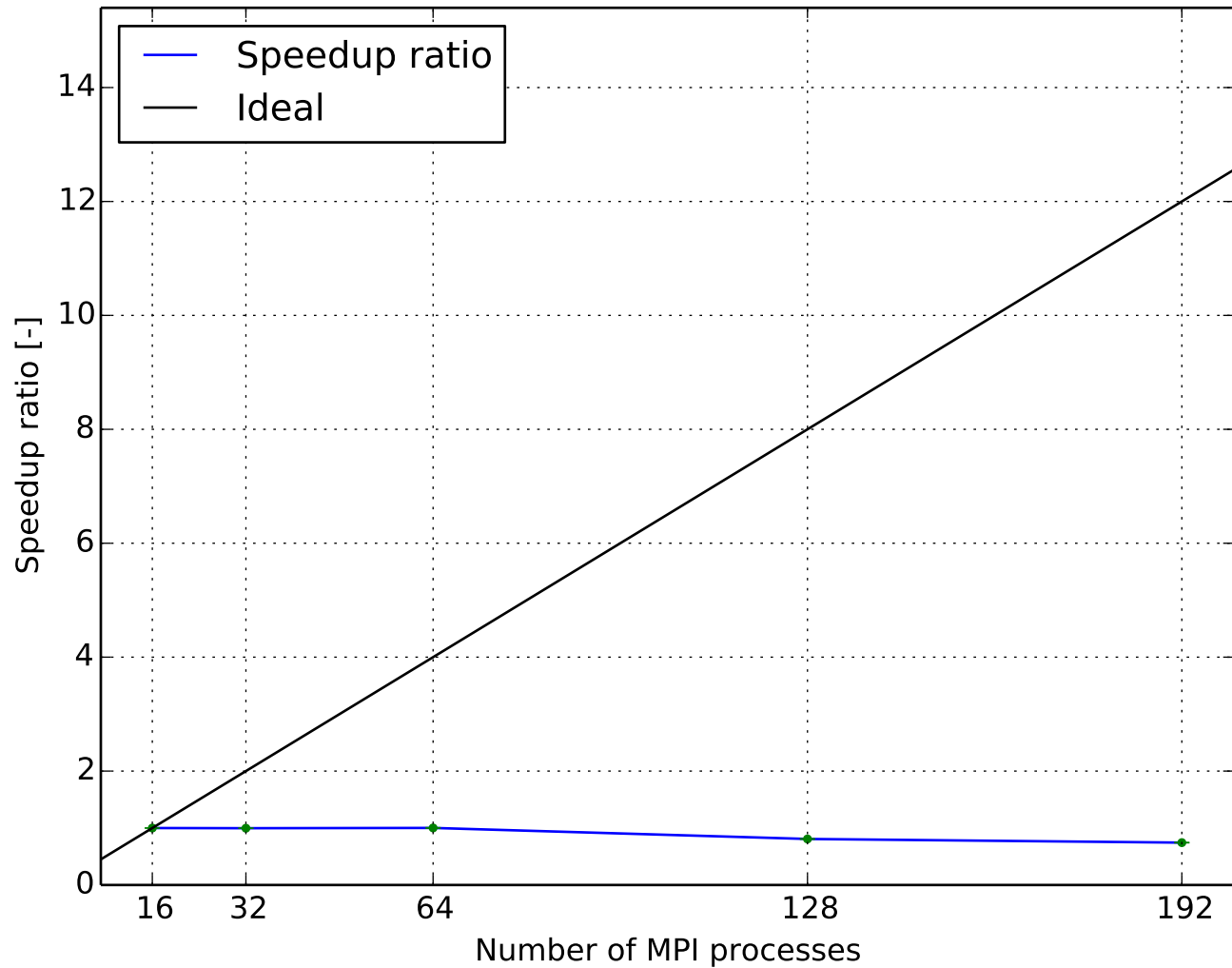
Parallel efficiency
(0.3744M cells, WALE ,GAMG-FDIC)



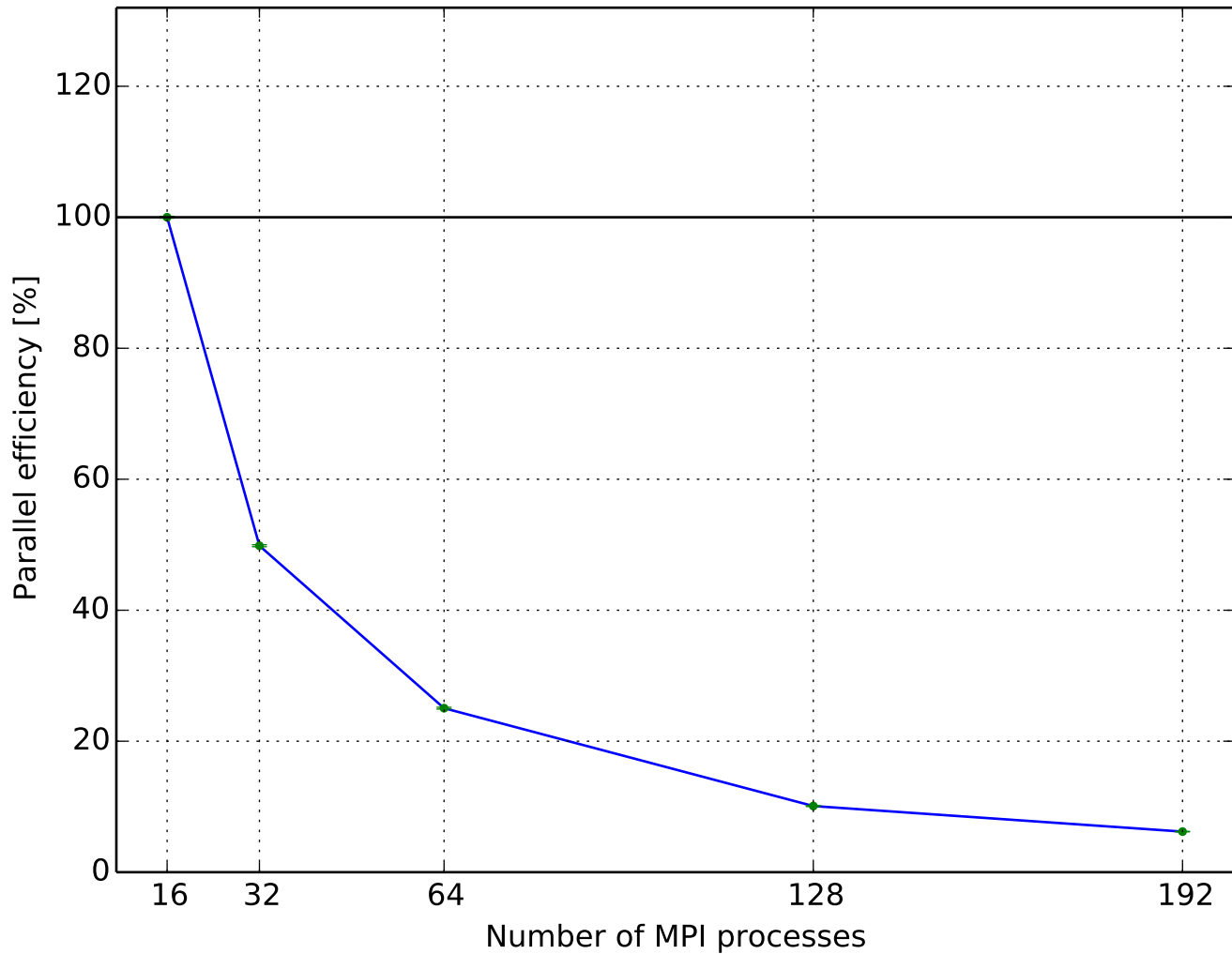
Execution time per time step
(0.3744M cells, WALE ,GAMG-GaussSeidel)



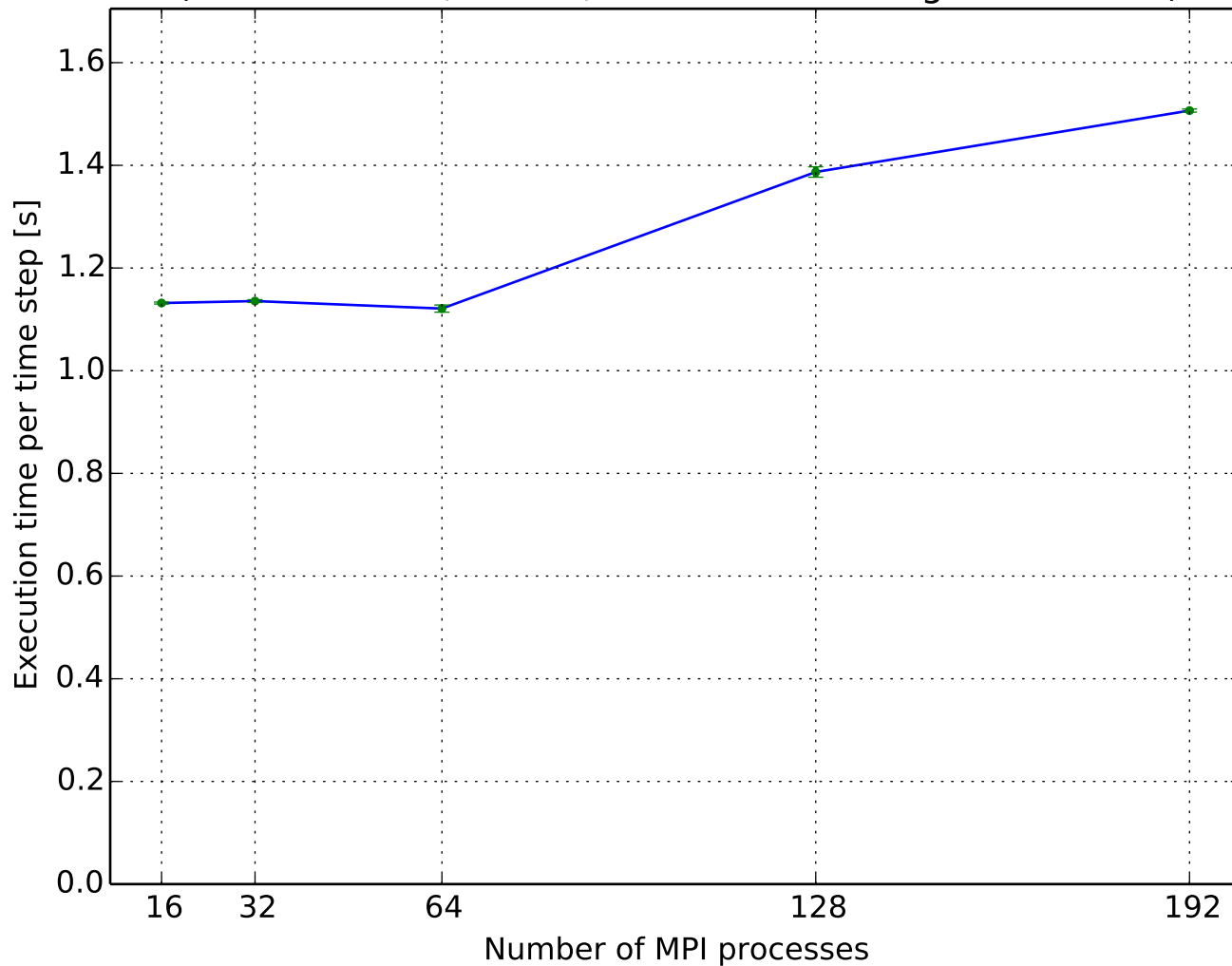
Speedup ratio
(0.3744M cells, WALE ,GAMG-GaussSeidel)



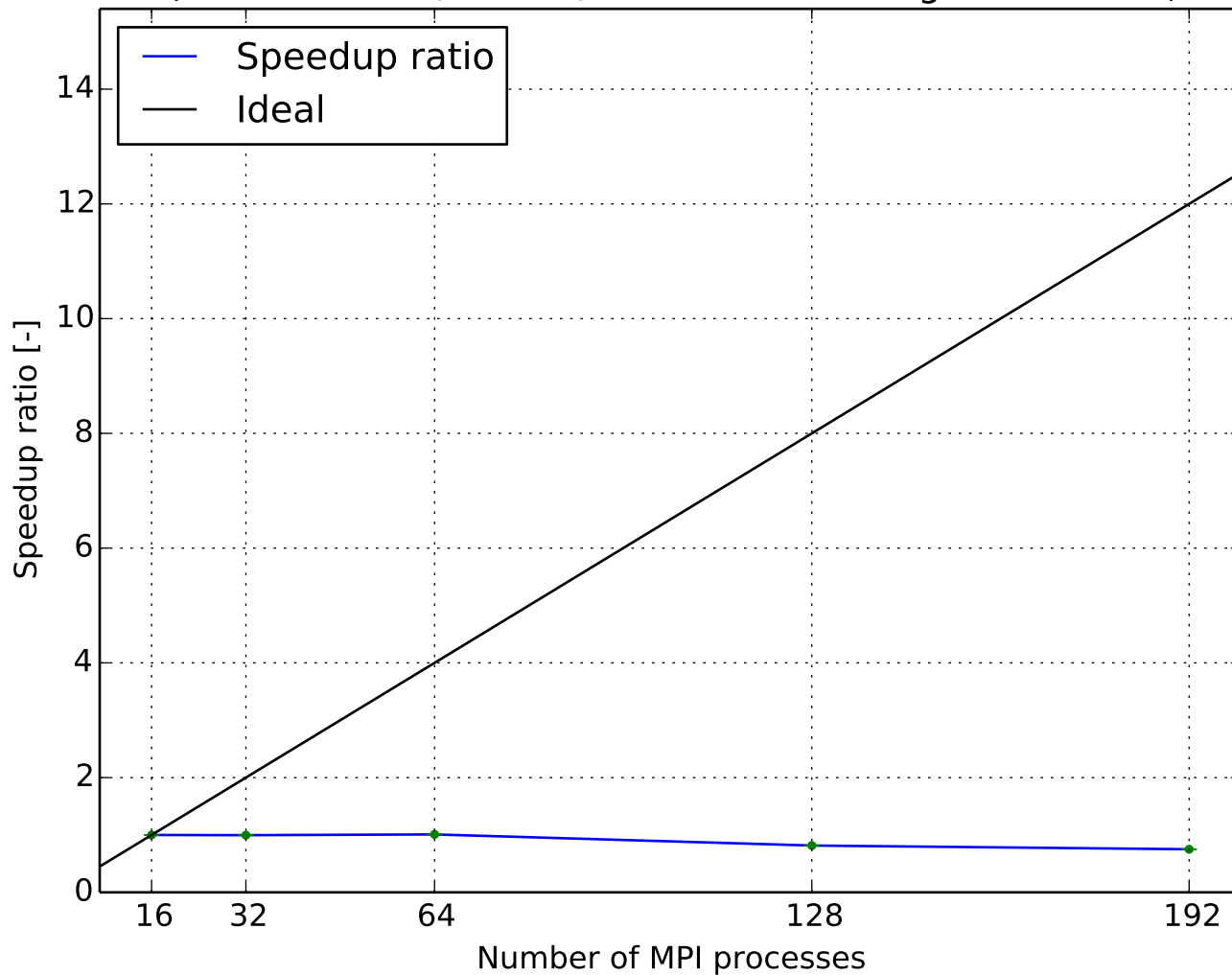
Parallel efficiency
(0.3744M cells, WALE ,GAMG-GaussSeidel)



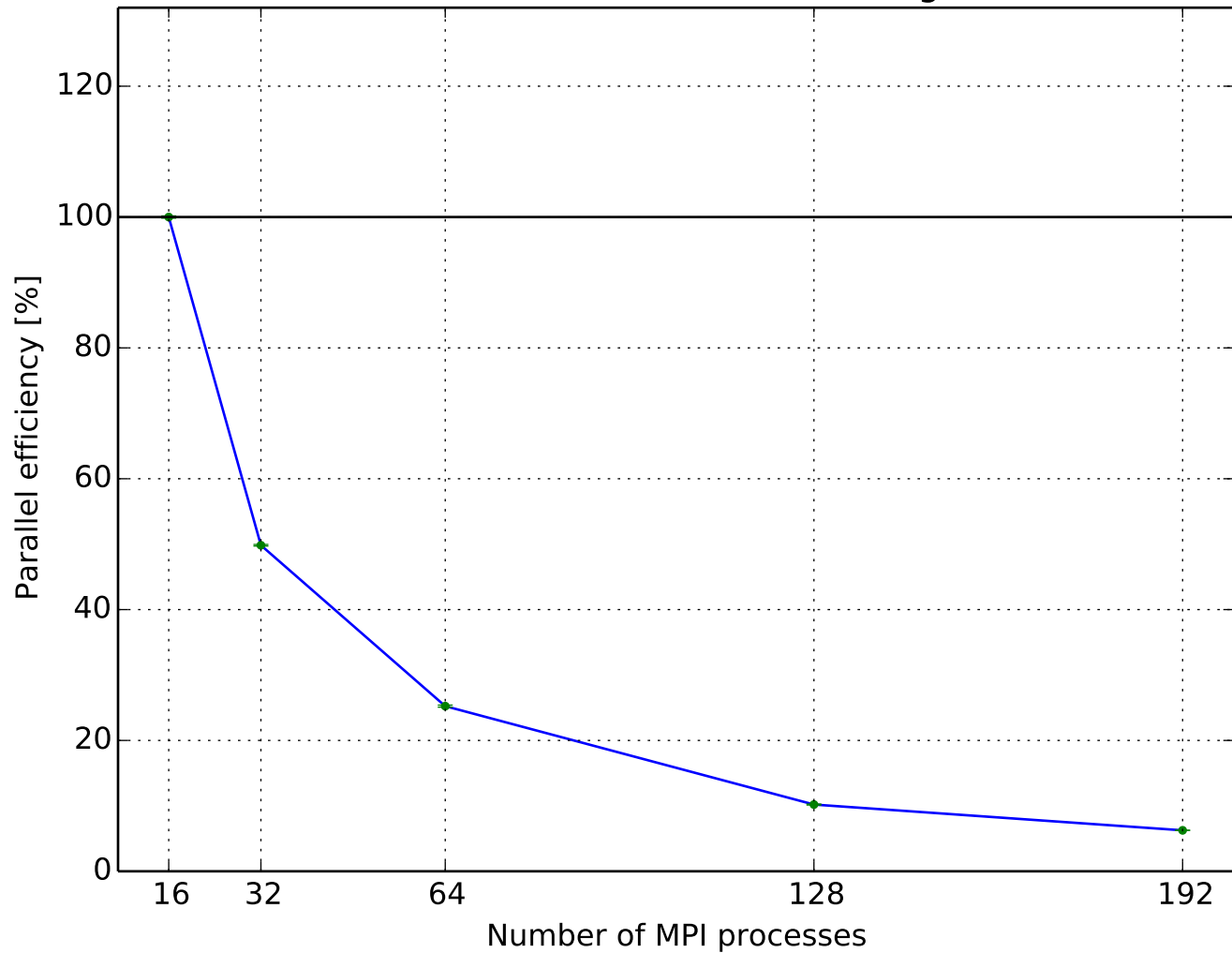
Execution time per time step
(0.3744M cells, WALE ,GAMG-nonBlockingGaussSeidel)



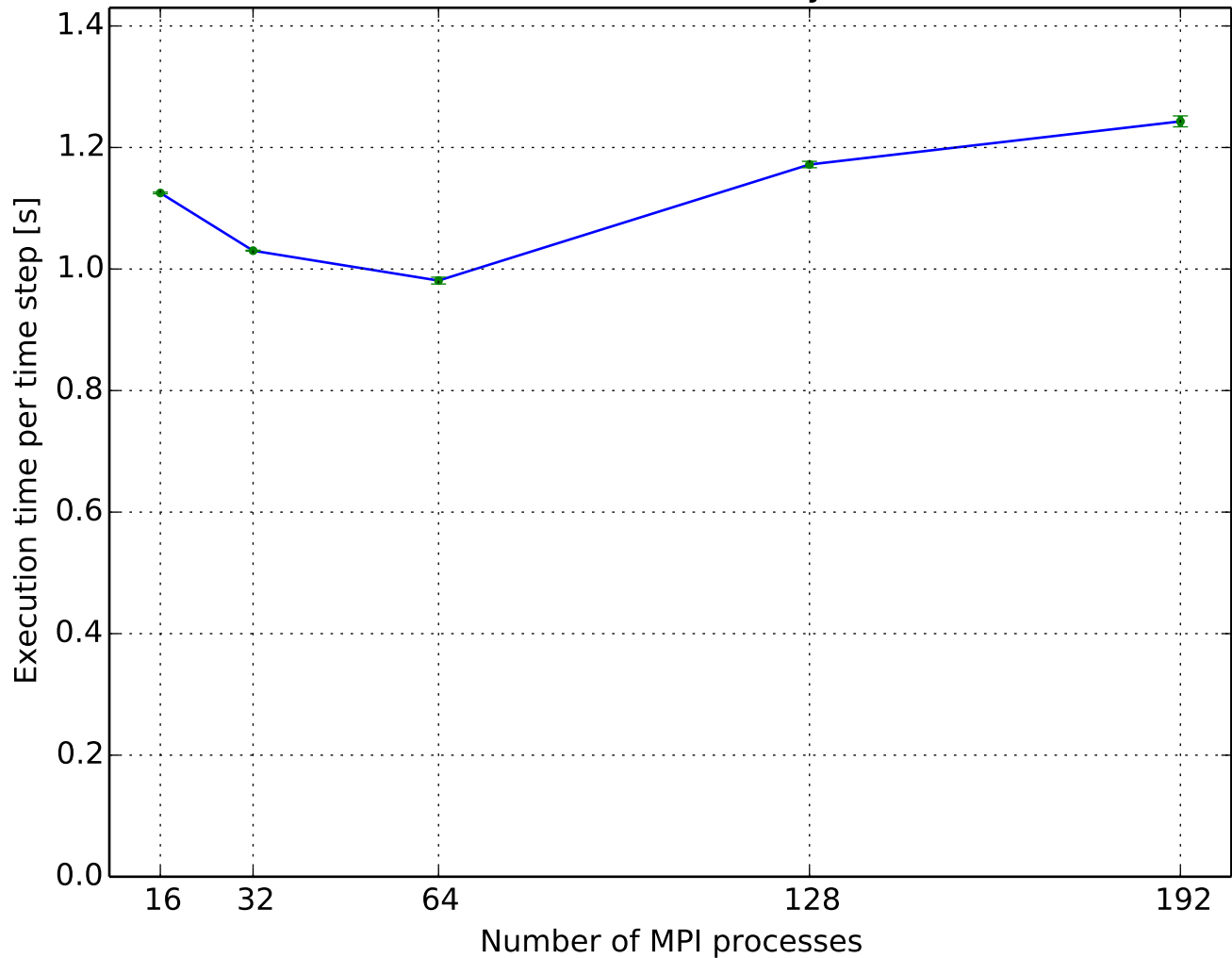
Speedup ratio
(0.3744M cells, WALE ,GAMG-nonBlockingGaussSeidel)



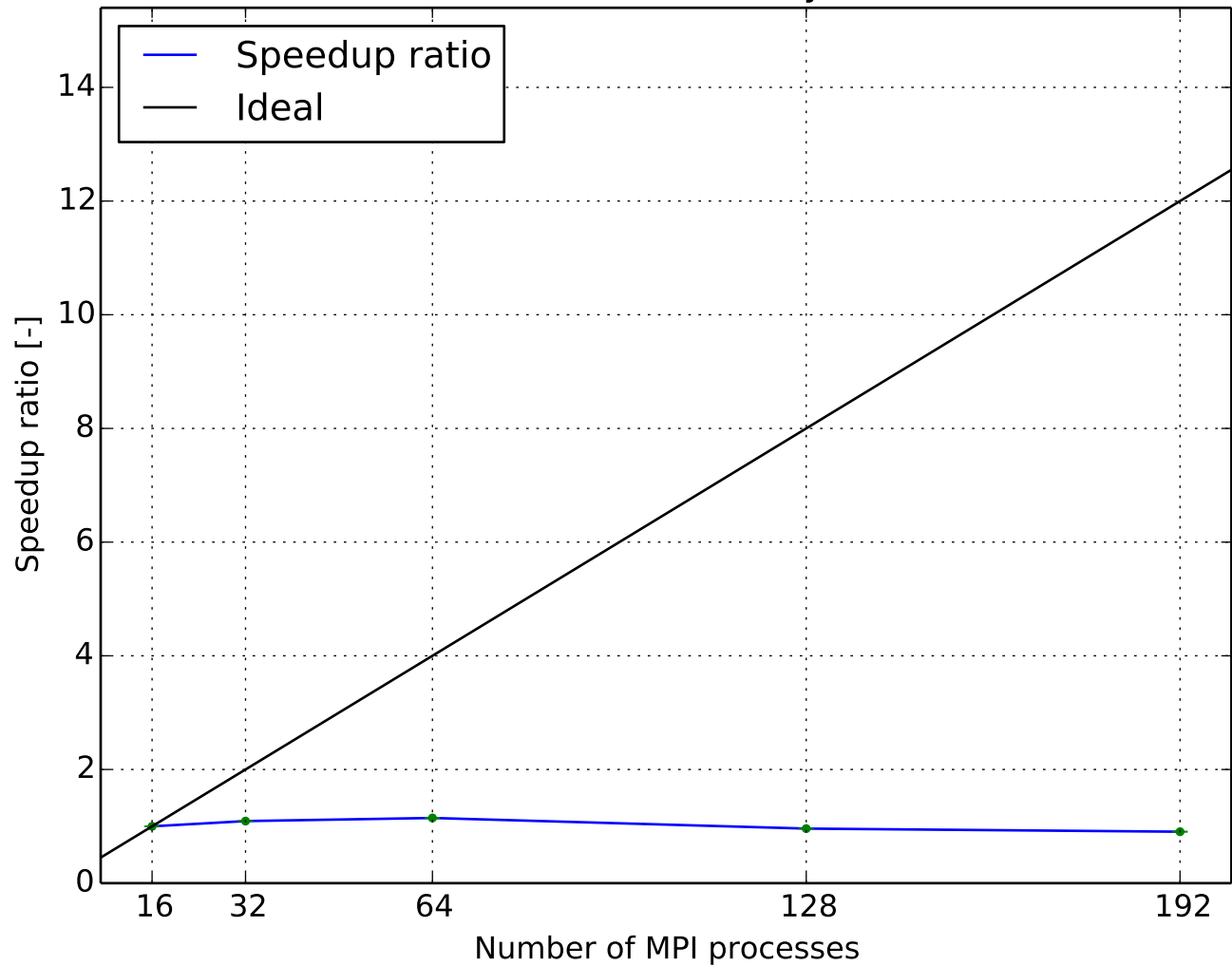
Parallel efficiency
(0.3744M cells, WALE ,GAMG-nonBlockingGaussSeidel)



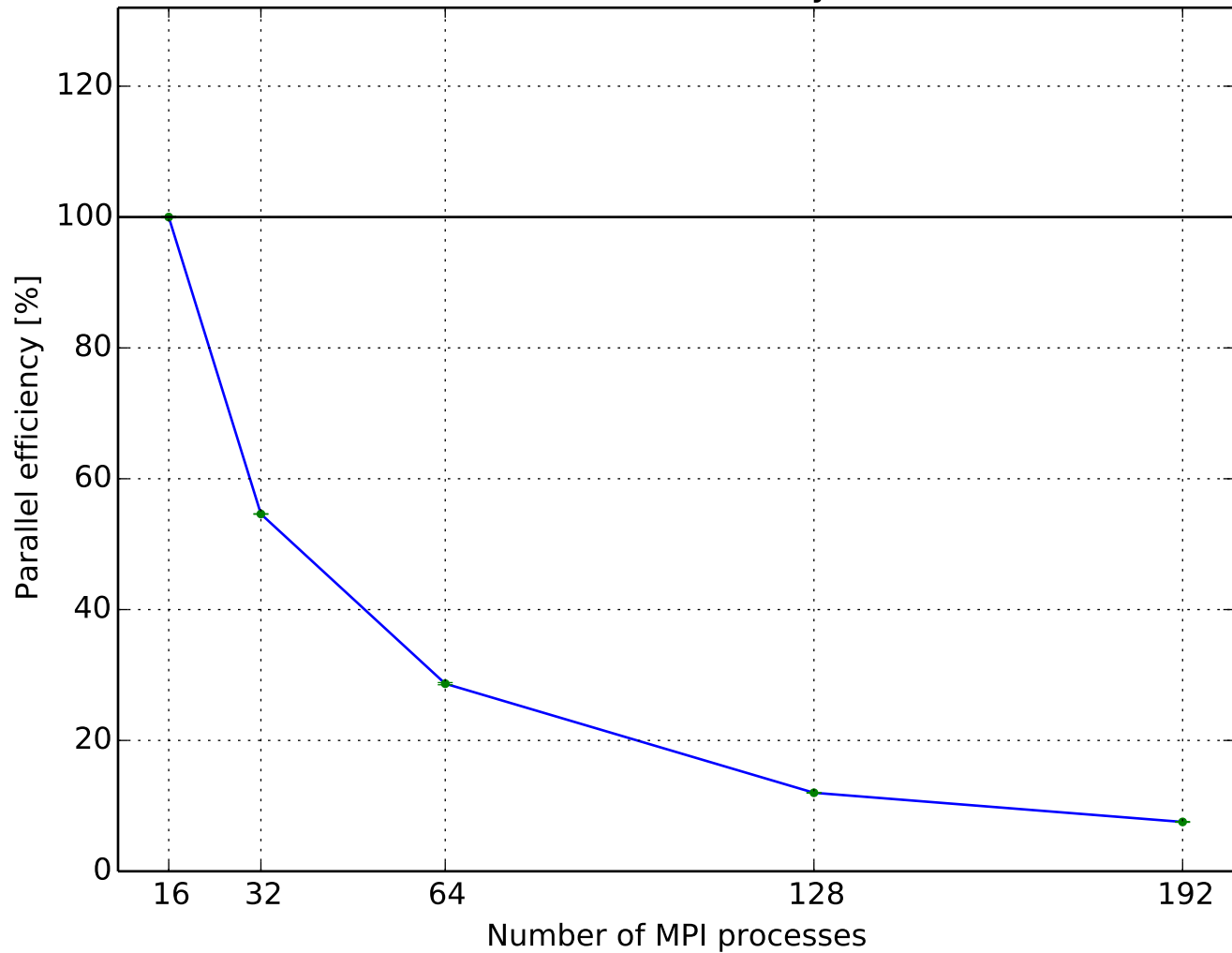
Execution time per time step
(0.3744M cells, WALE ,GAMG-symGaussSeidel)



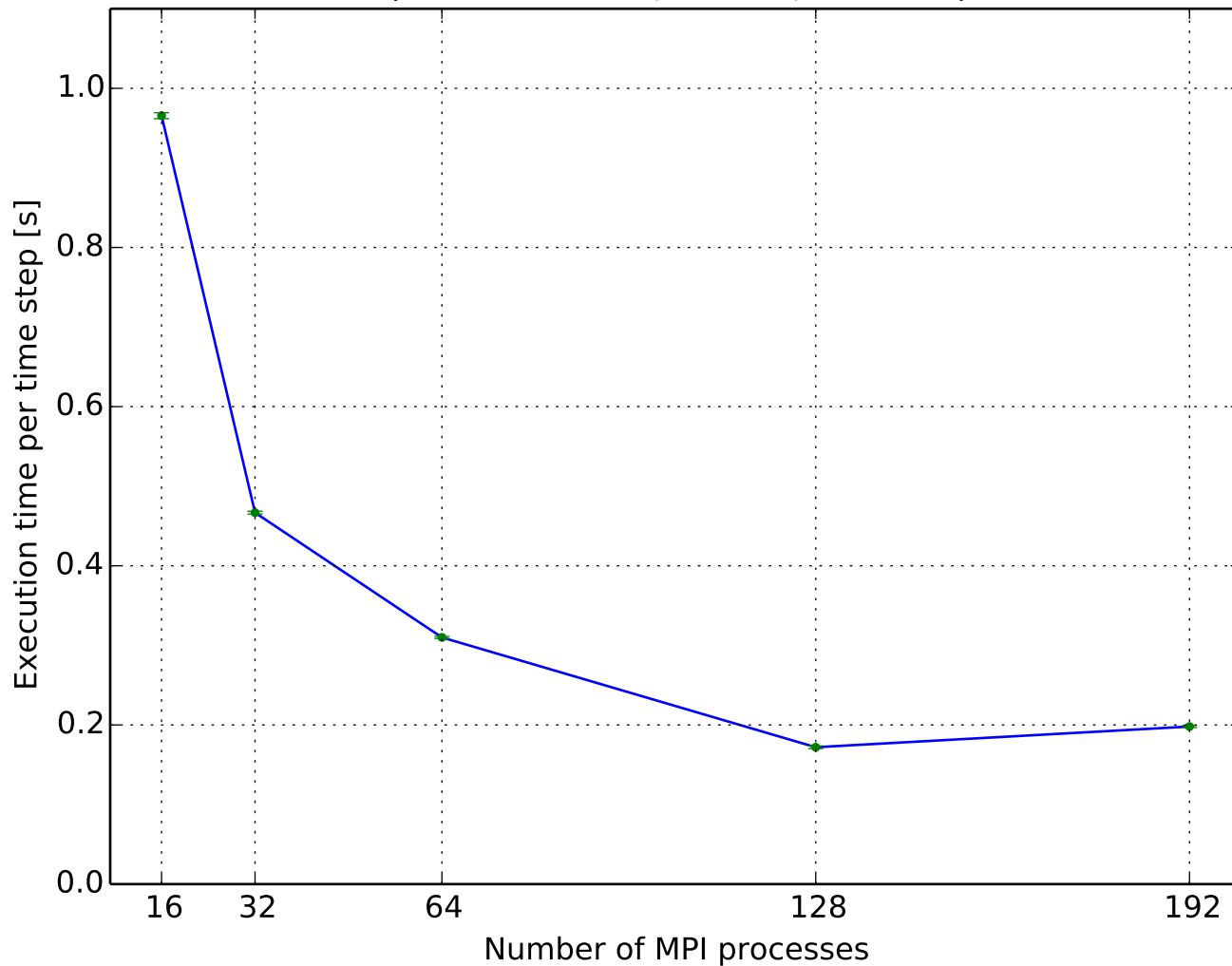
Speedup ratio
(0.3744M cells, WALE ,GAMG-symGaussSeidel)



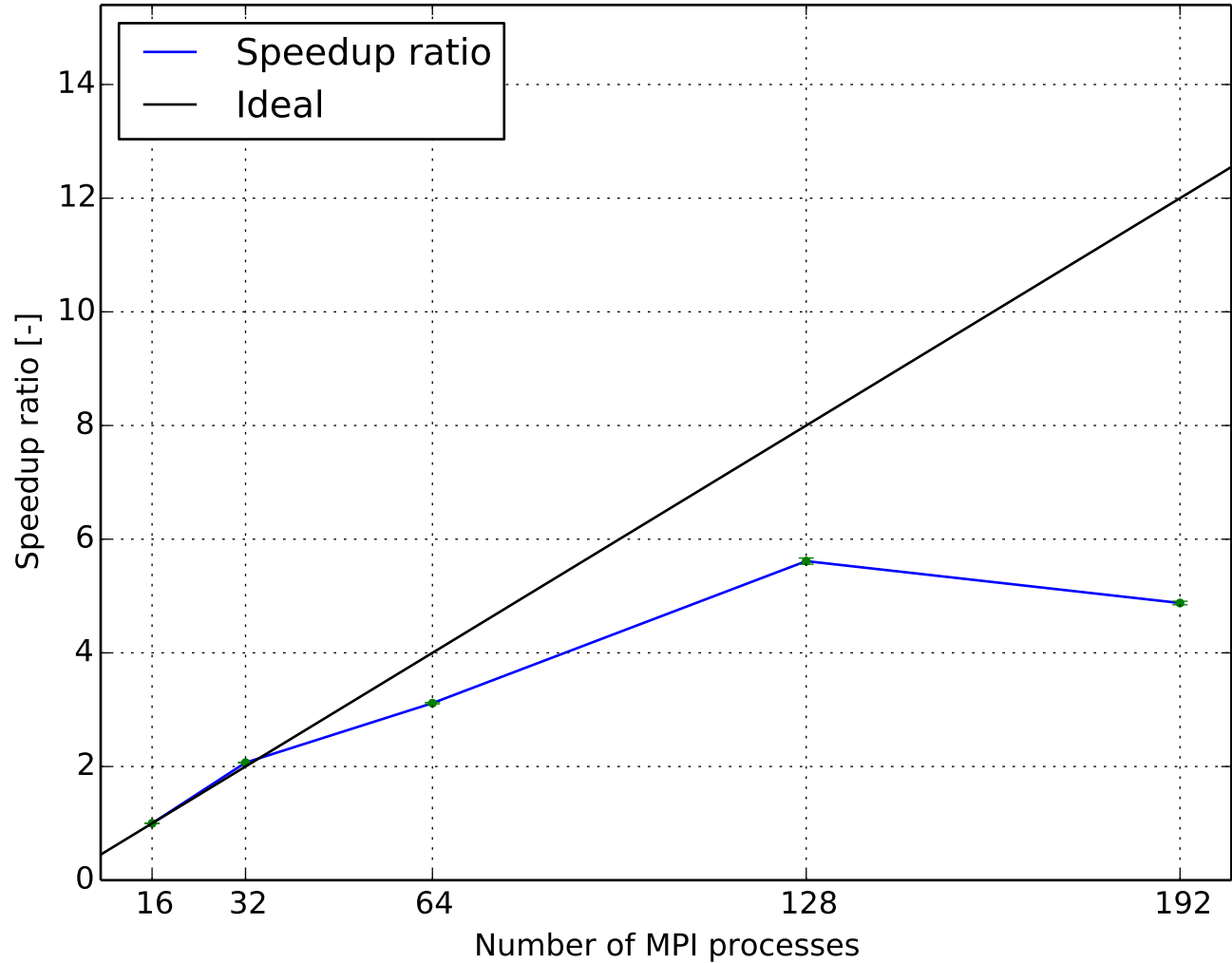
Parallel efficiency
(0.3744M cells, WALE ,GAMG-symGaussSeidel)



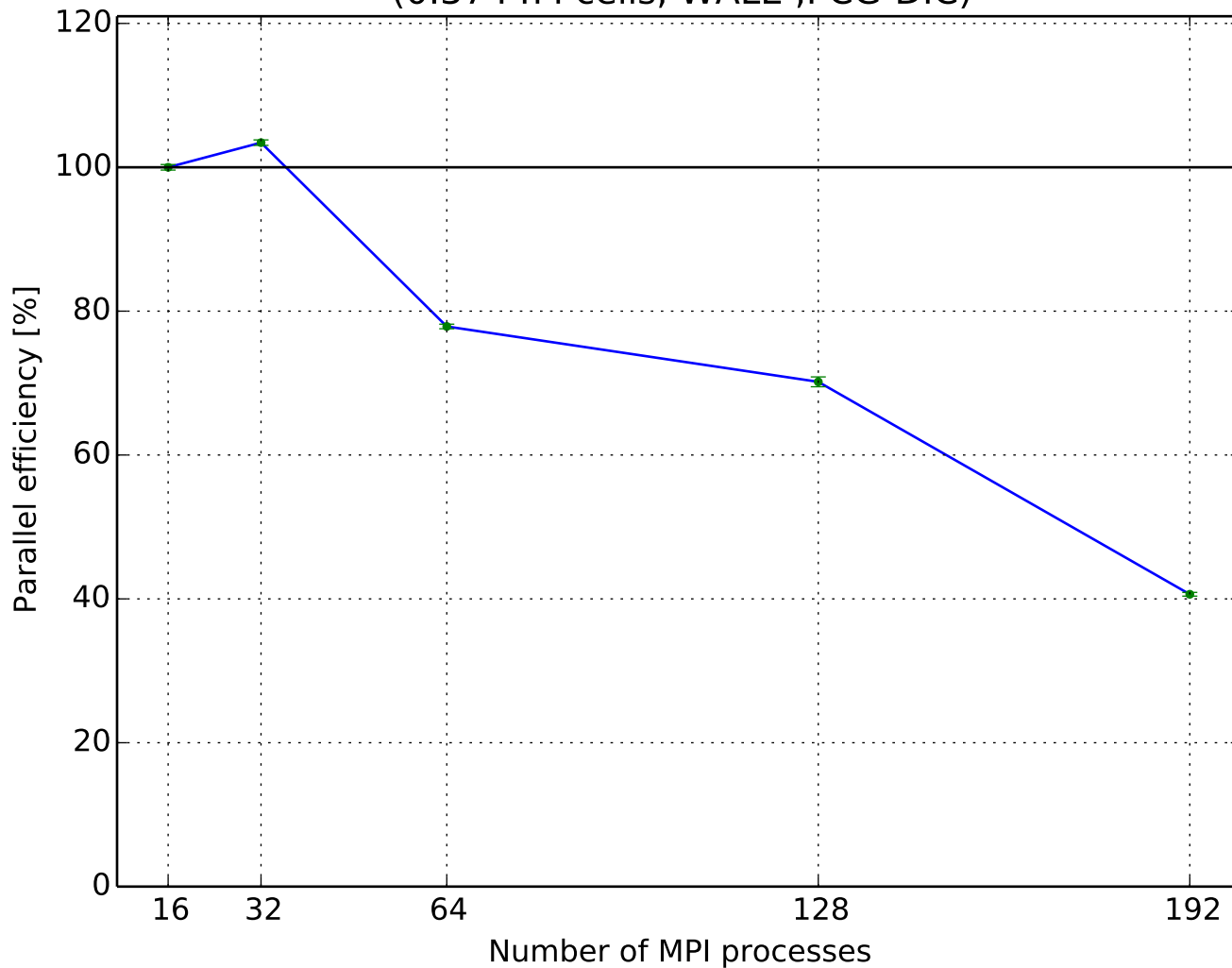
Execution time per time step
(0.3744M cells, WALE ,PCG-DIC)



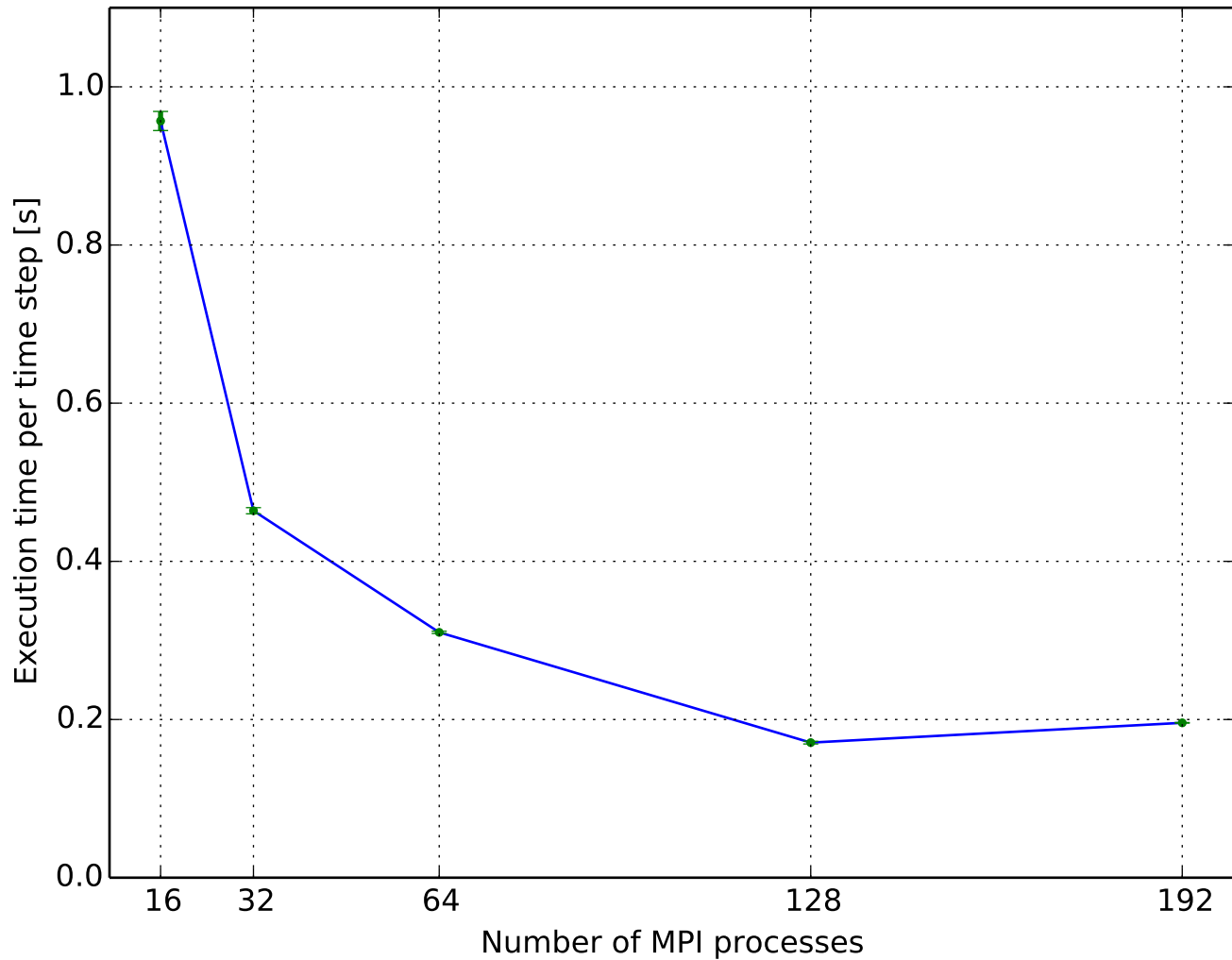
Speedup ratio
(0.3744M cells, WALE ,PCG-DIC)



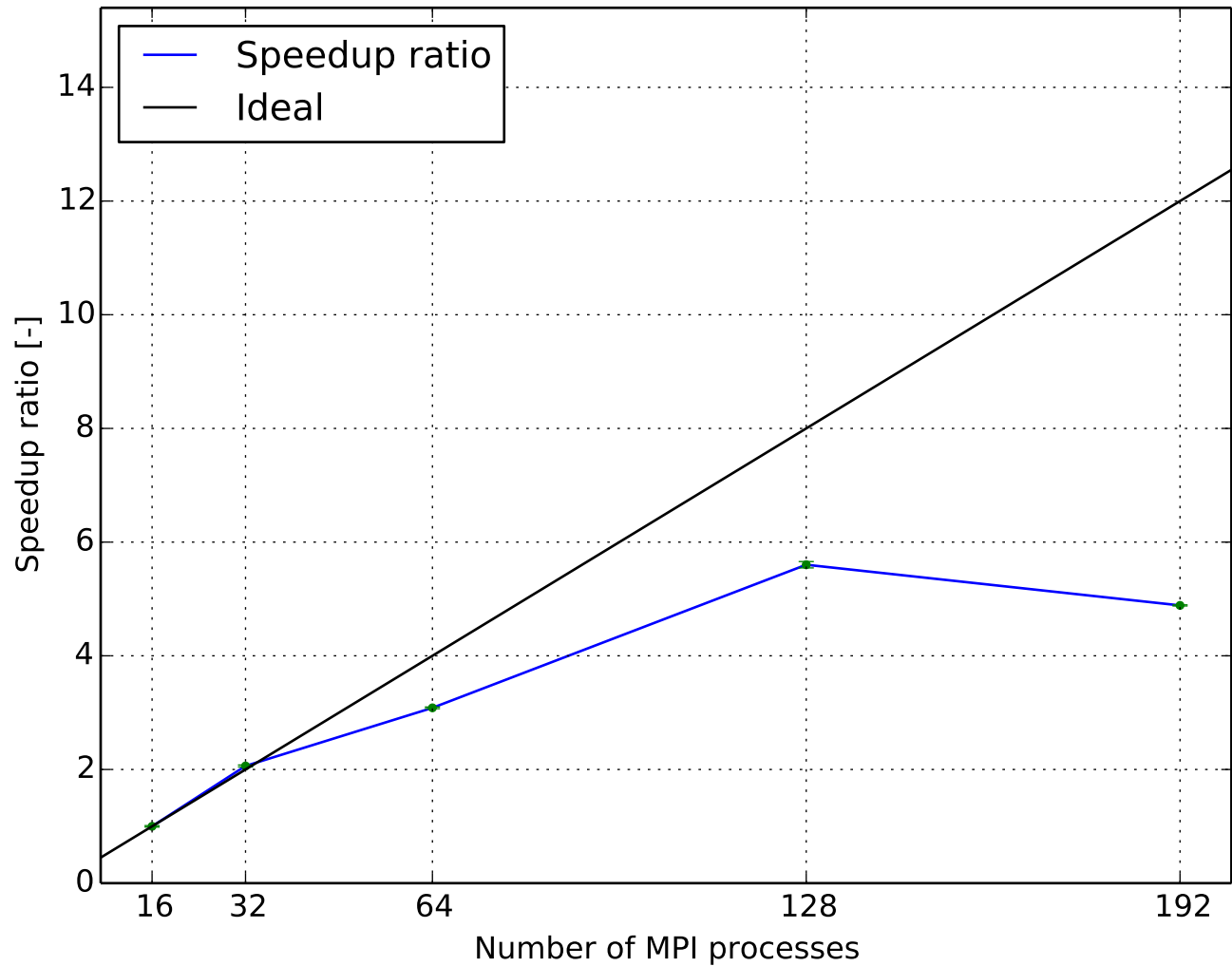
Parallel efficiency
(0.3744M cells, WALE ,PCG-DIC)



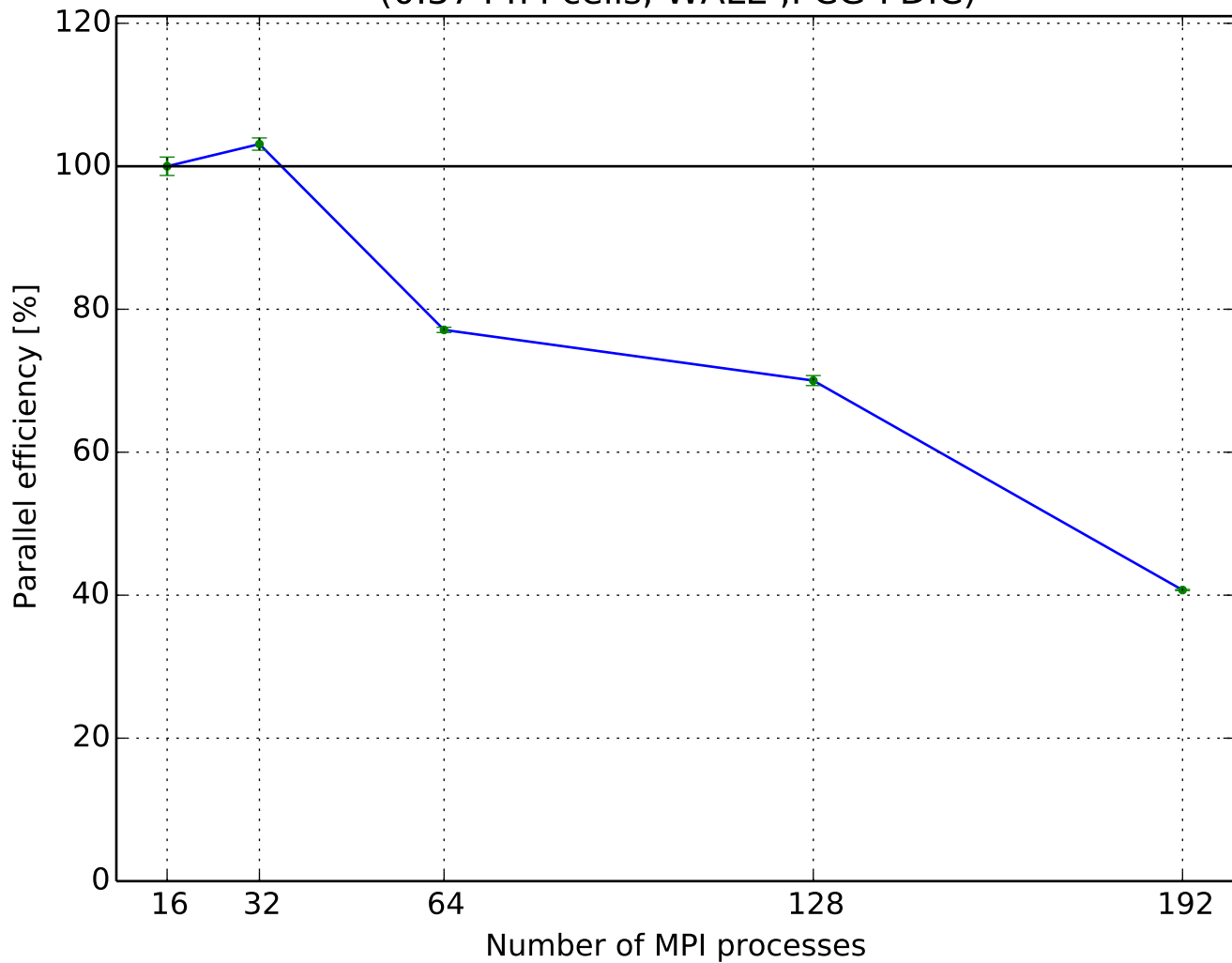
Execution time per time step
(0.3744M cells, WALE ,PCG-FDIC)



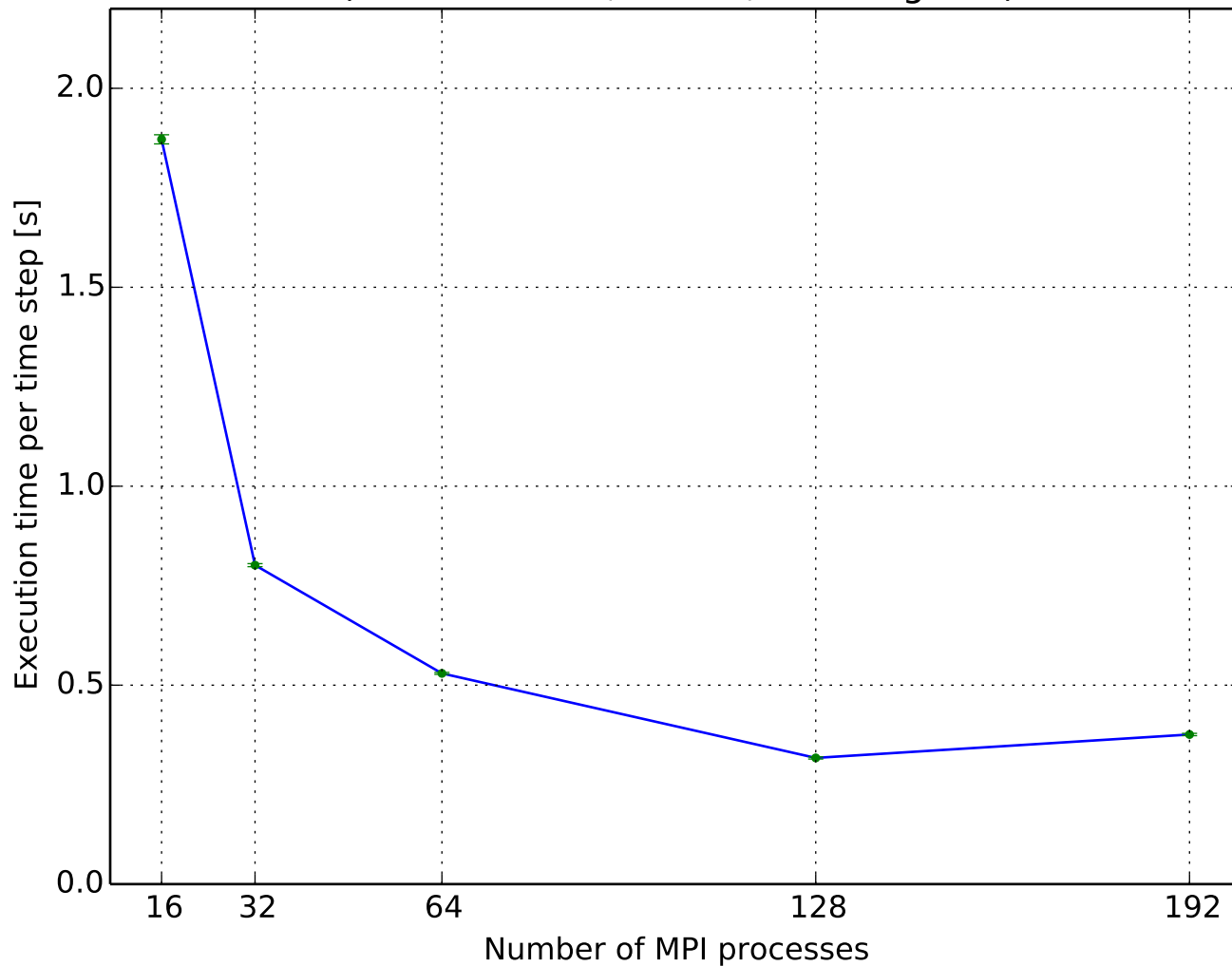
Speedup ratio
(0.3744M cells, WALE ,PCG-FDIC)



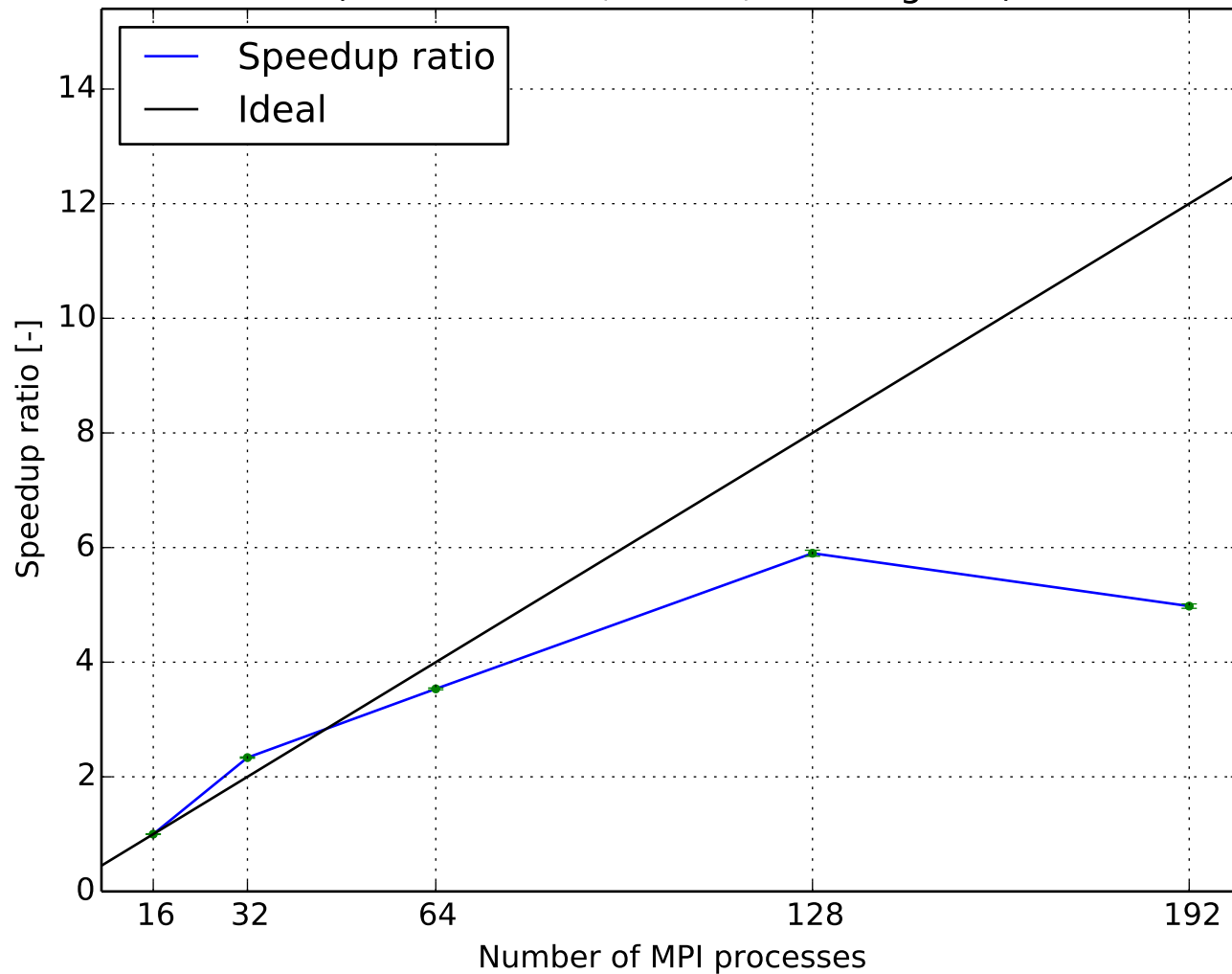
Parallel efficiency
(0.3744M cells, WALE ,PCG-FDIC)



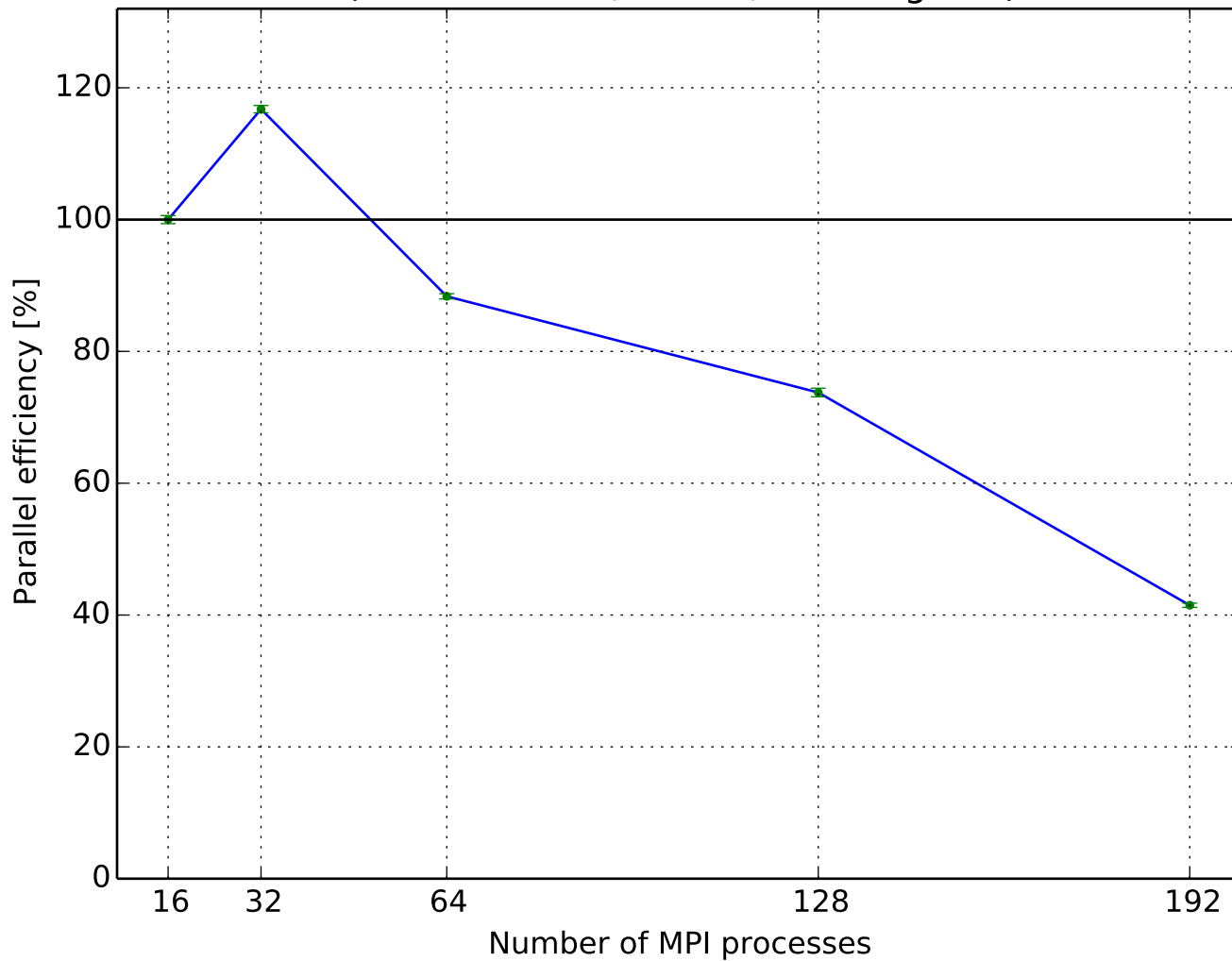
Execution time per time step
(0.3744M cells, WALE ,PCG-diagonal)



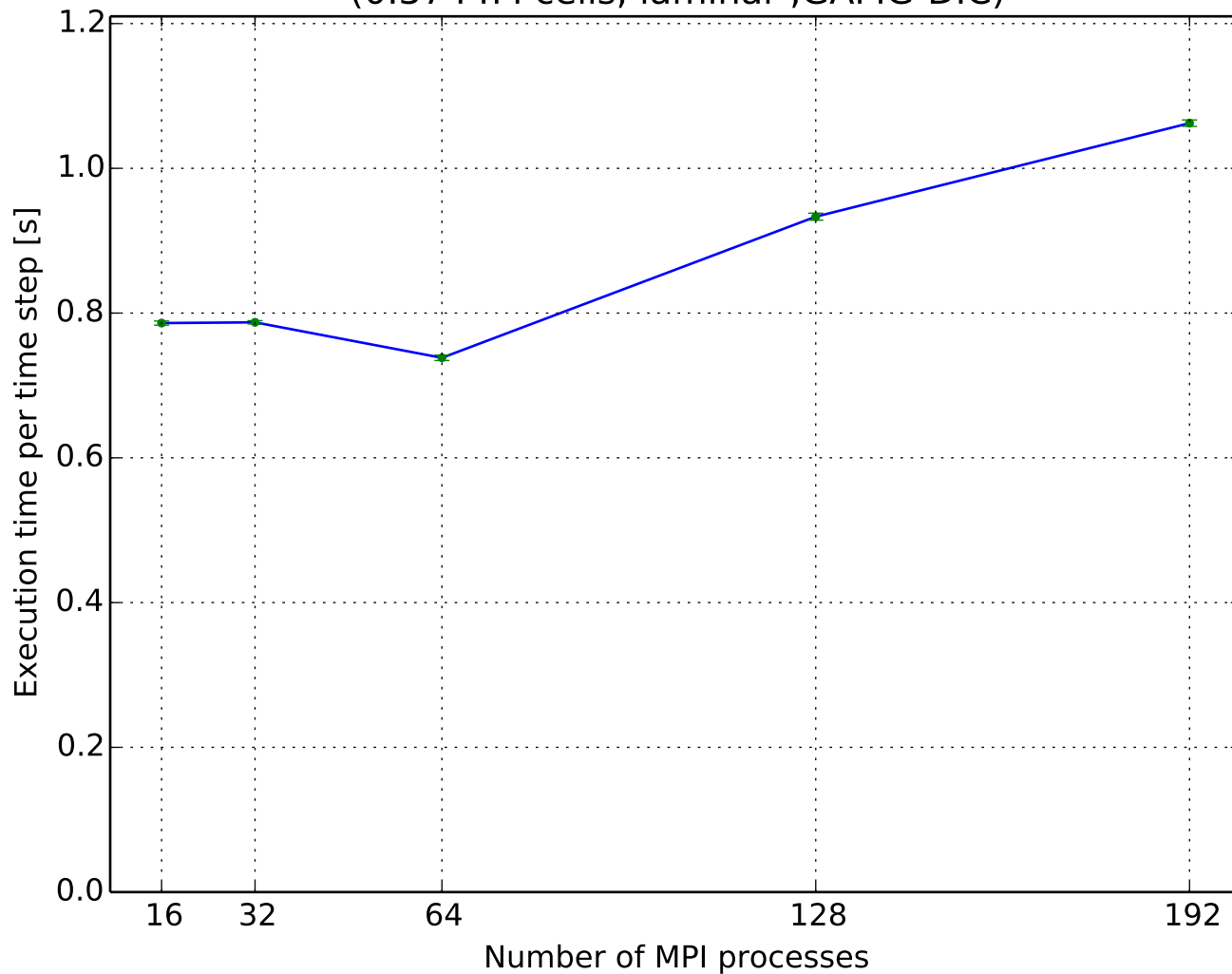
Speedup ratio
(0.3744M cells, WALE ,PCG-diagonal)



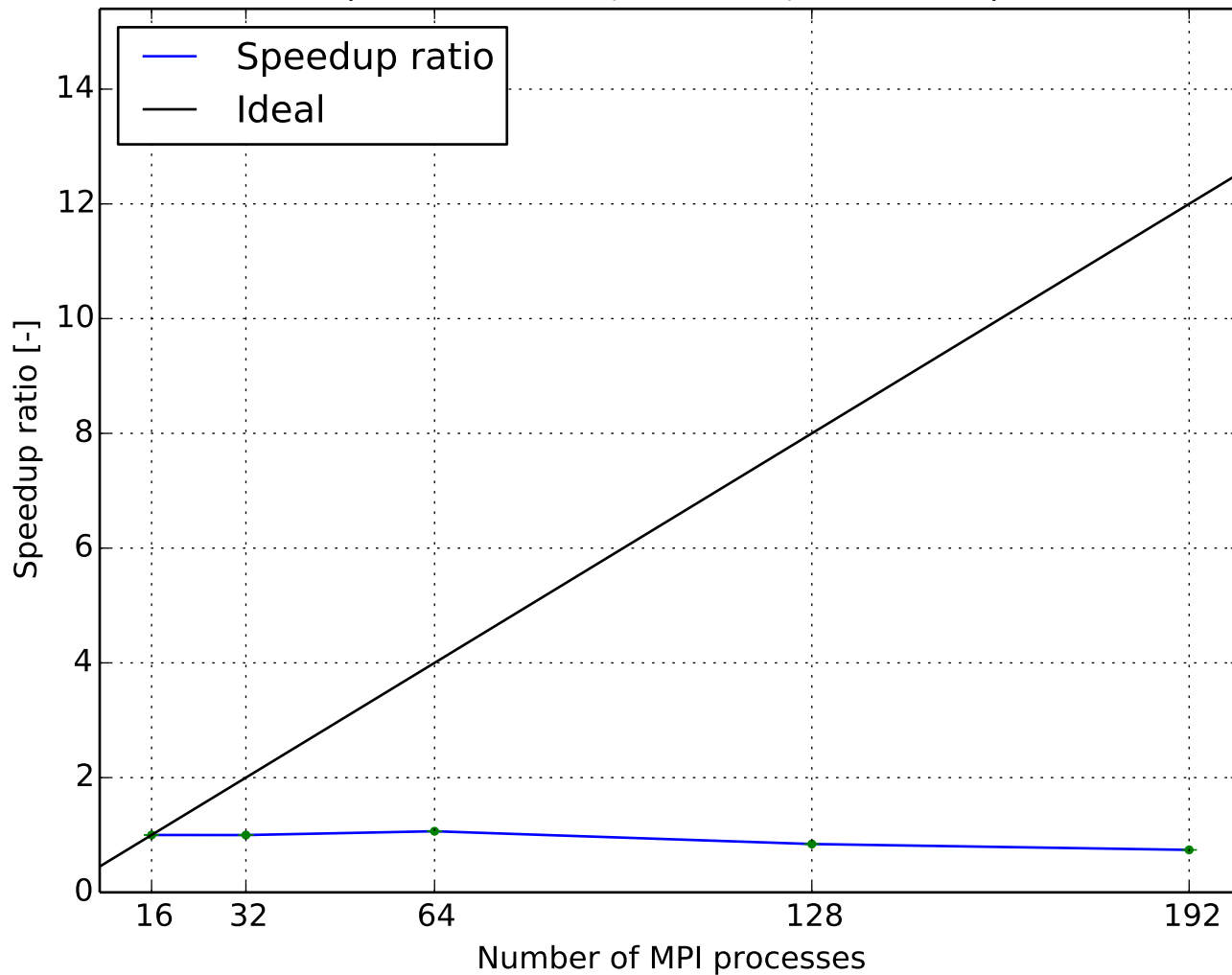
Parallel efficiency
(0.3744M cells, WALE ,PCG-diagonal)



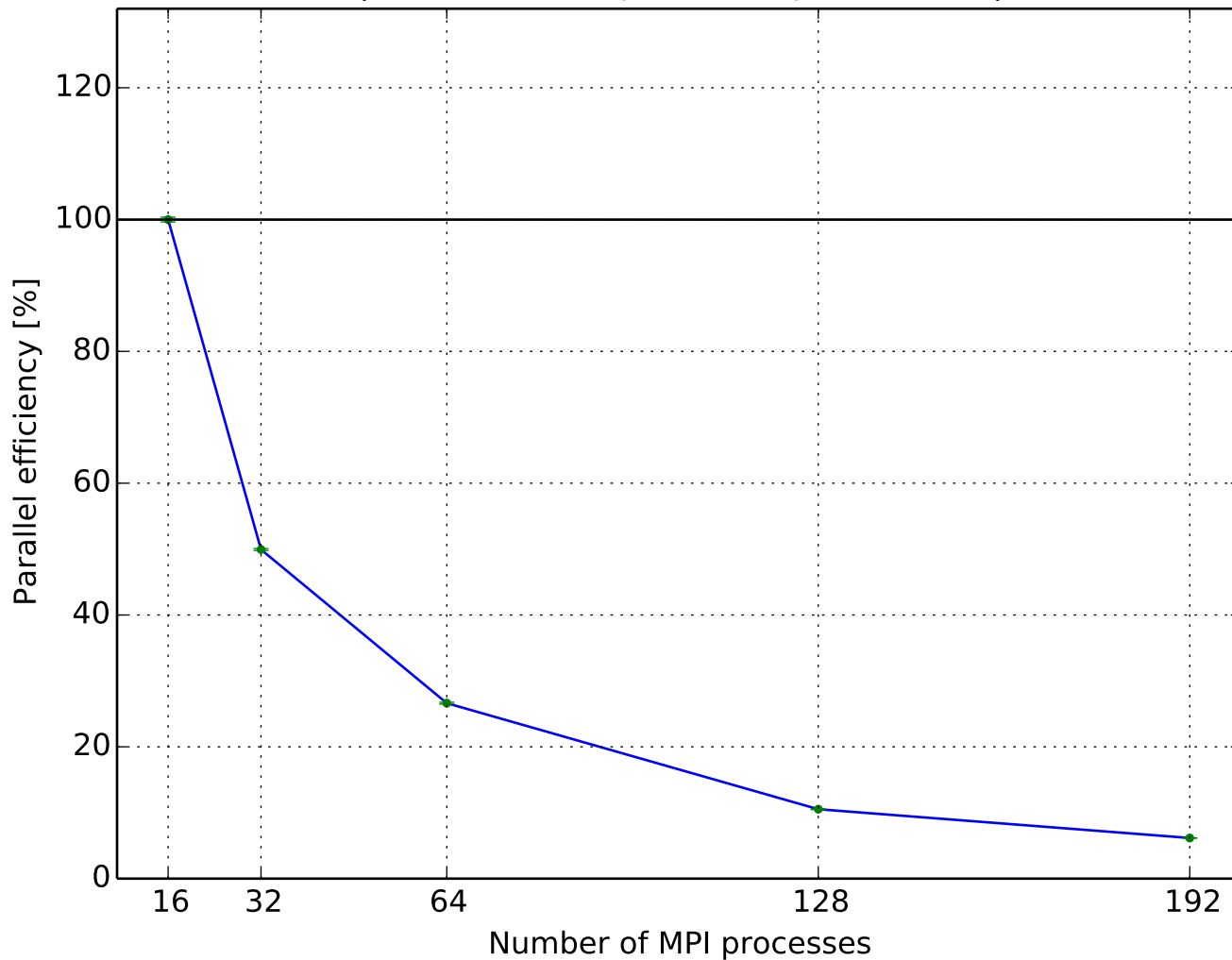
Execution time per time step
(0.3744M cells, laminar ,GAMG-DIC)



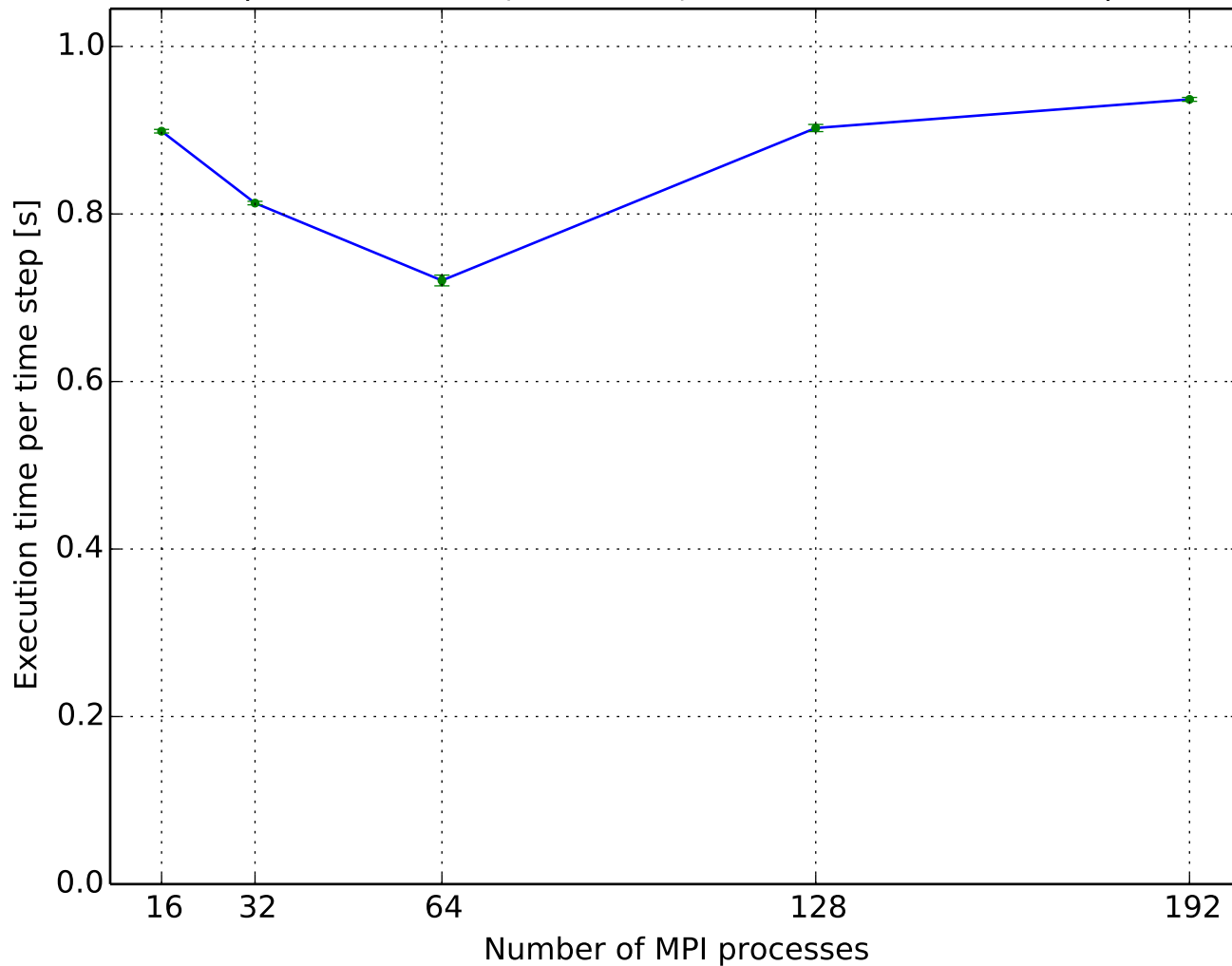
Speedup ratio
(0.3744M cells, laminar ,GAMG-DIC)



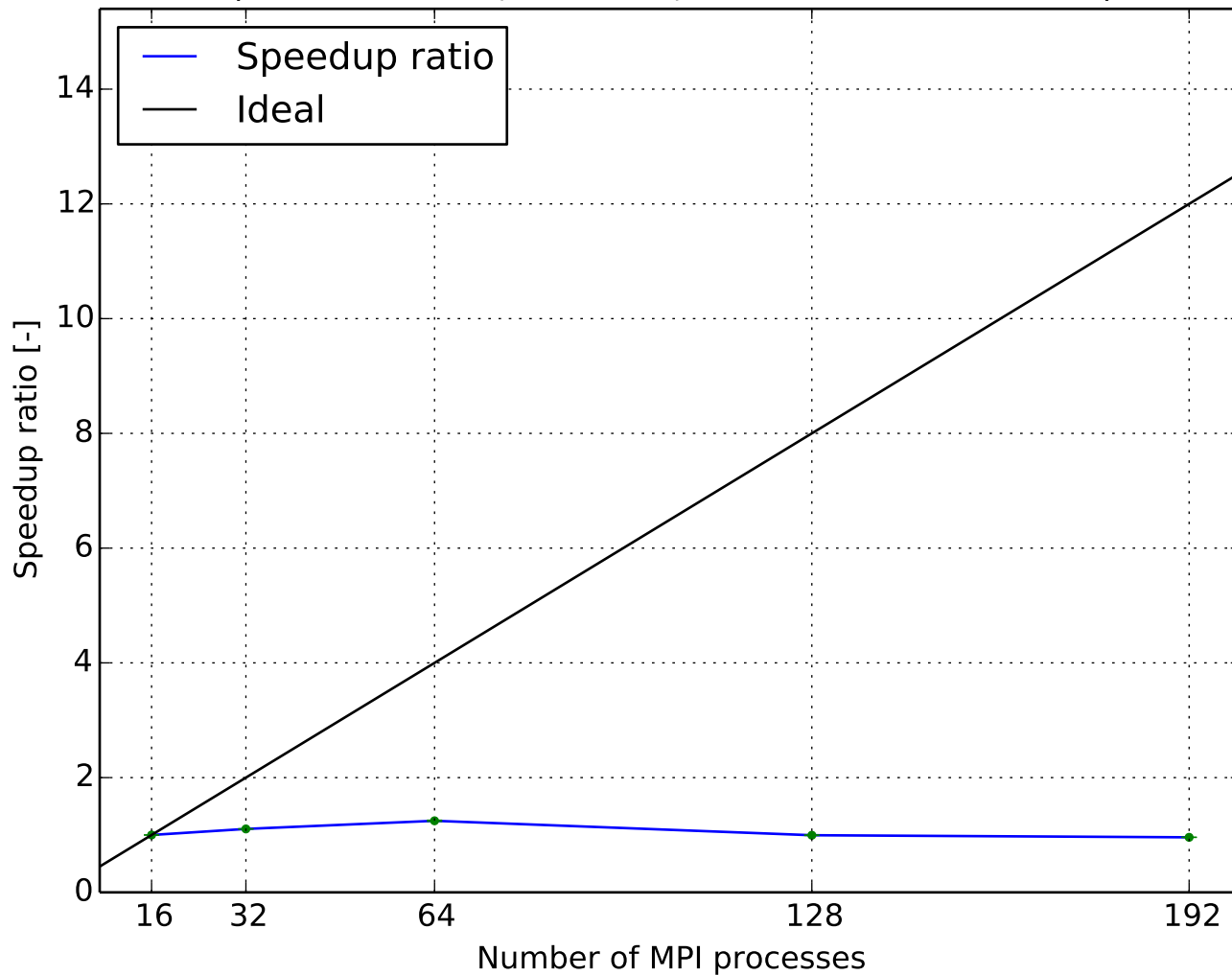
Parallel efficiency
(0.3744M cells, laminar ,GAMG-DIC)



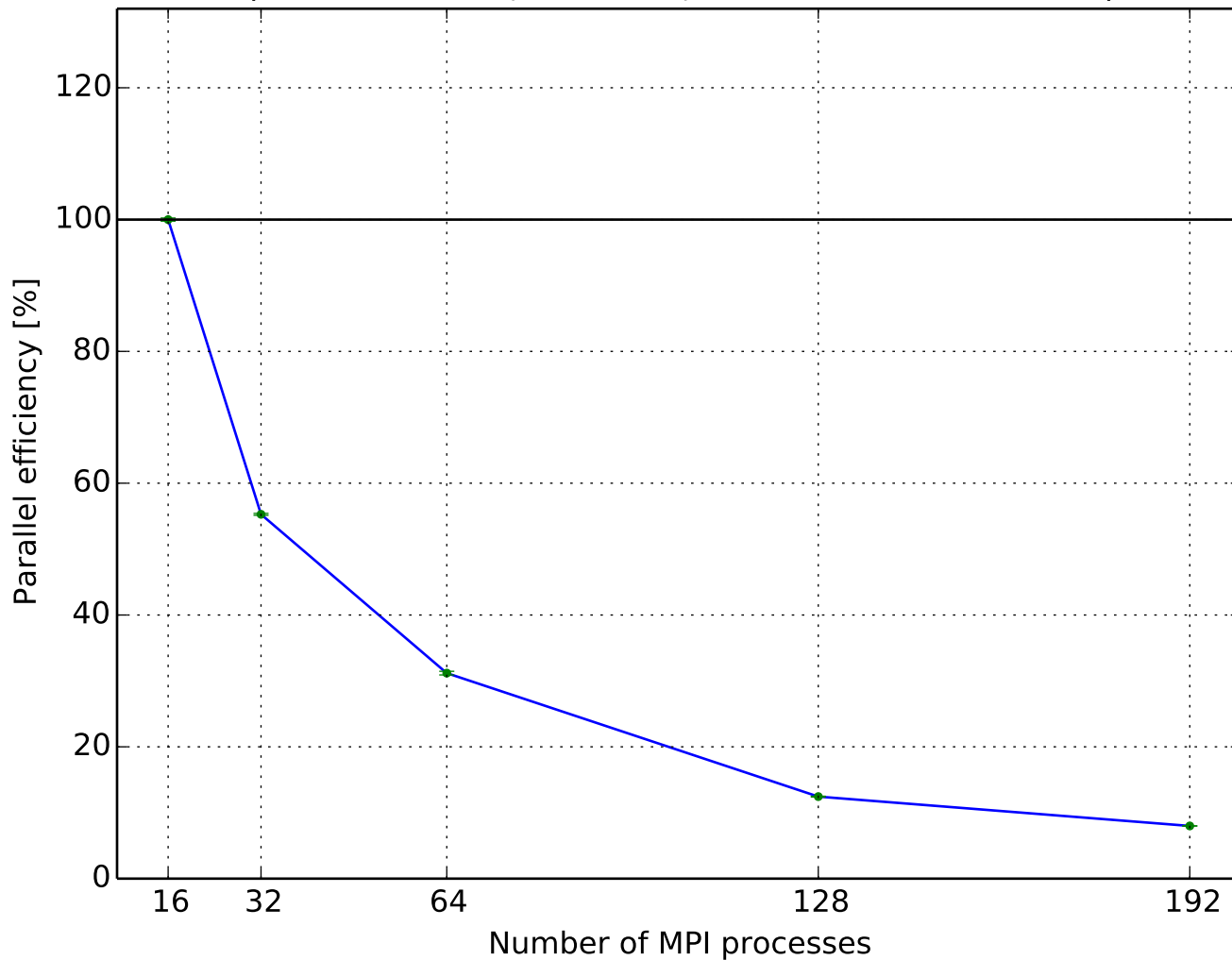
Execution time per time step
(0.3744M cells, laminar ,GAMG-DICGaussSeidel)



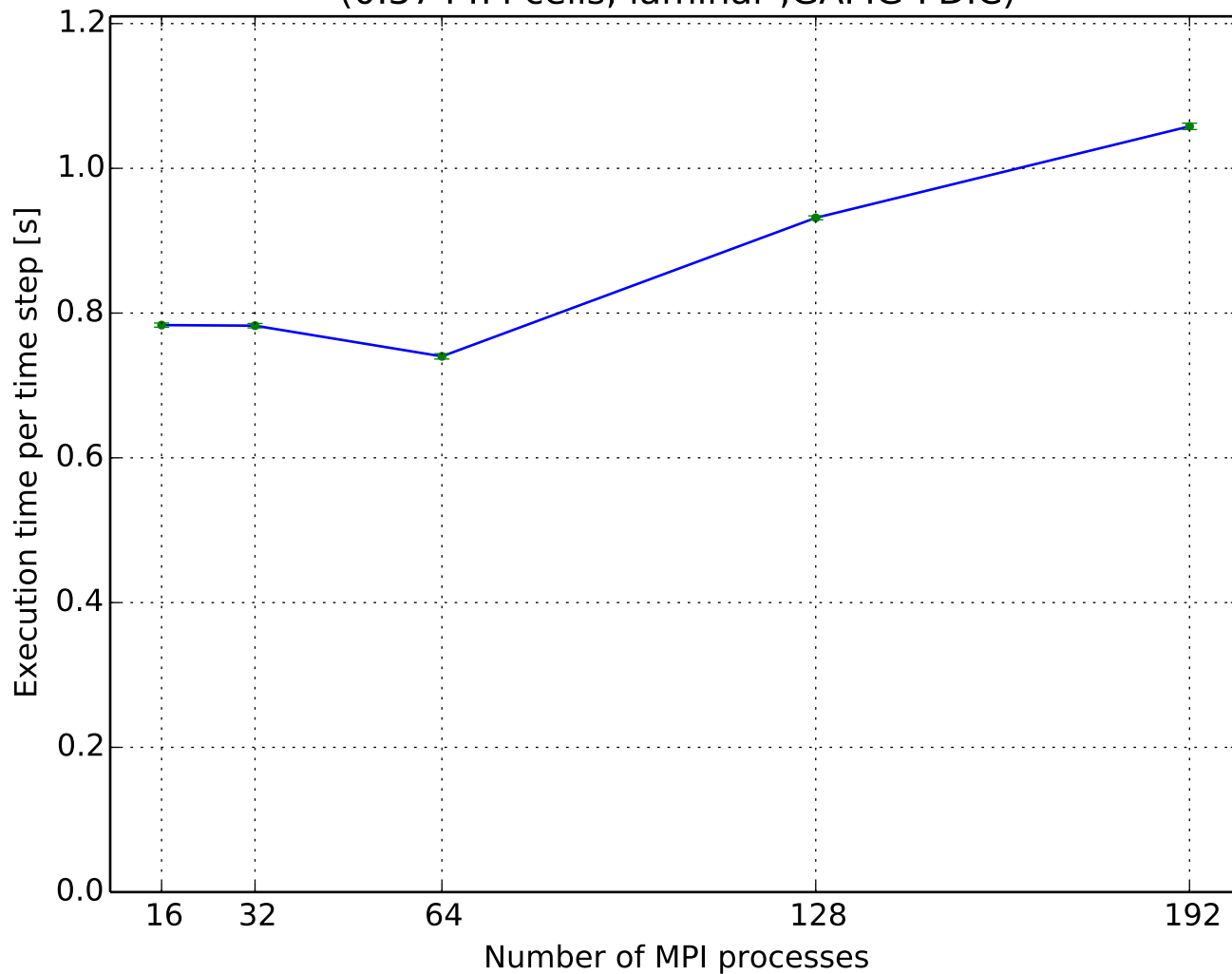
Speedup ratio
(0.3744M cells, laminar ,GAMG-DICGaussSeidel)



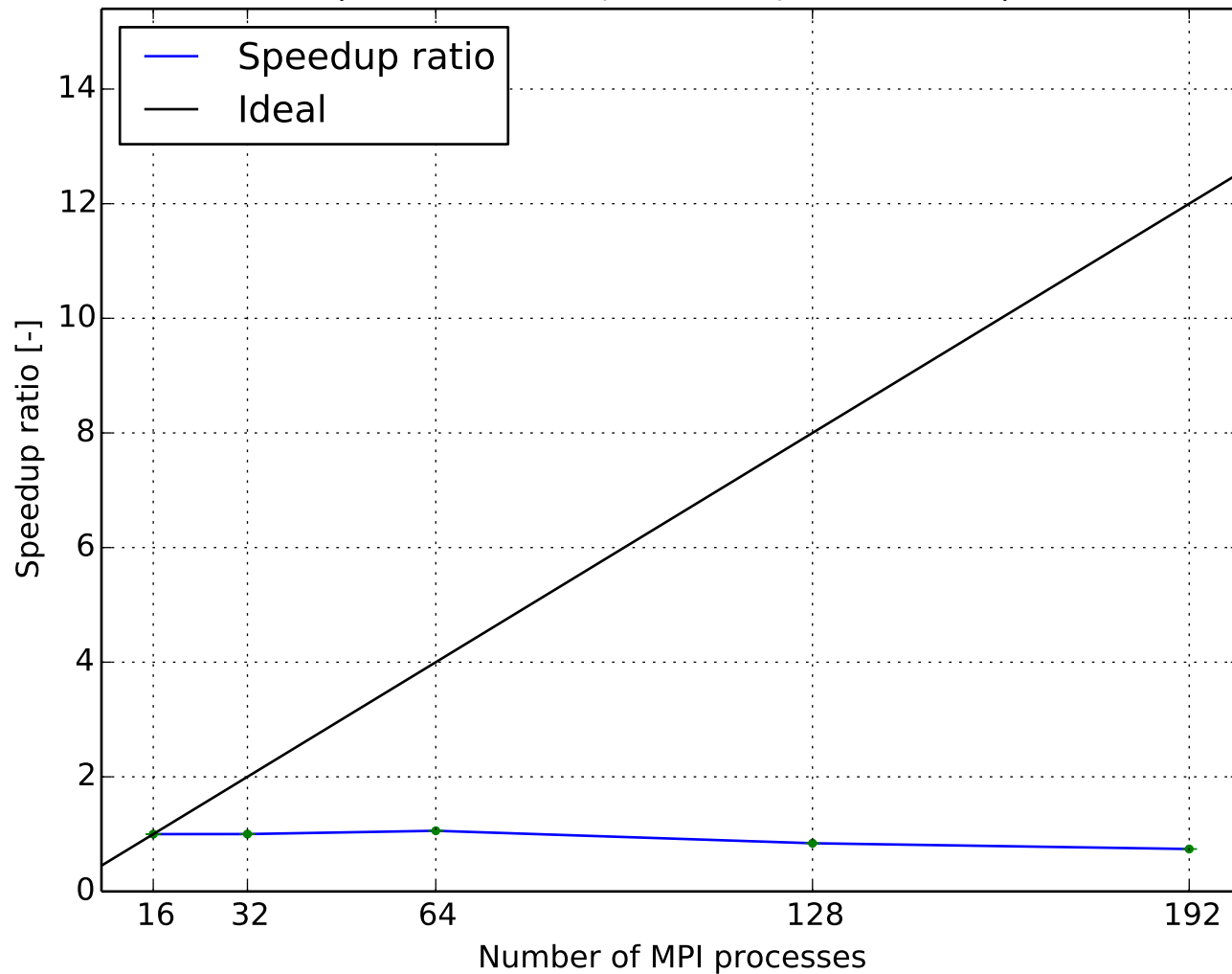
Parallel efficiency
(0.3744M cells, laminar ,GAMG-DICGaussSeidel)



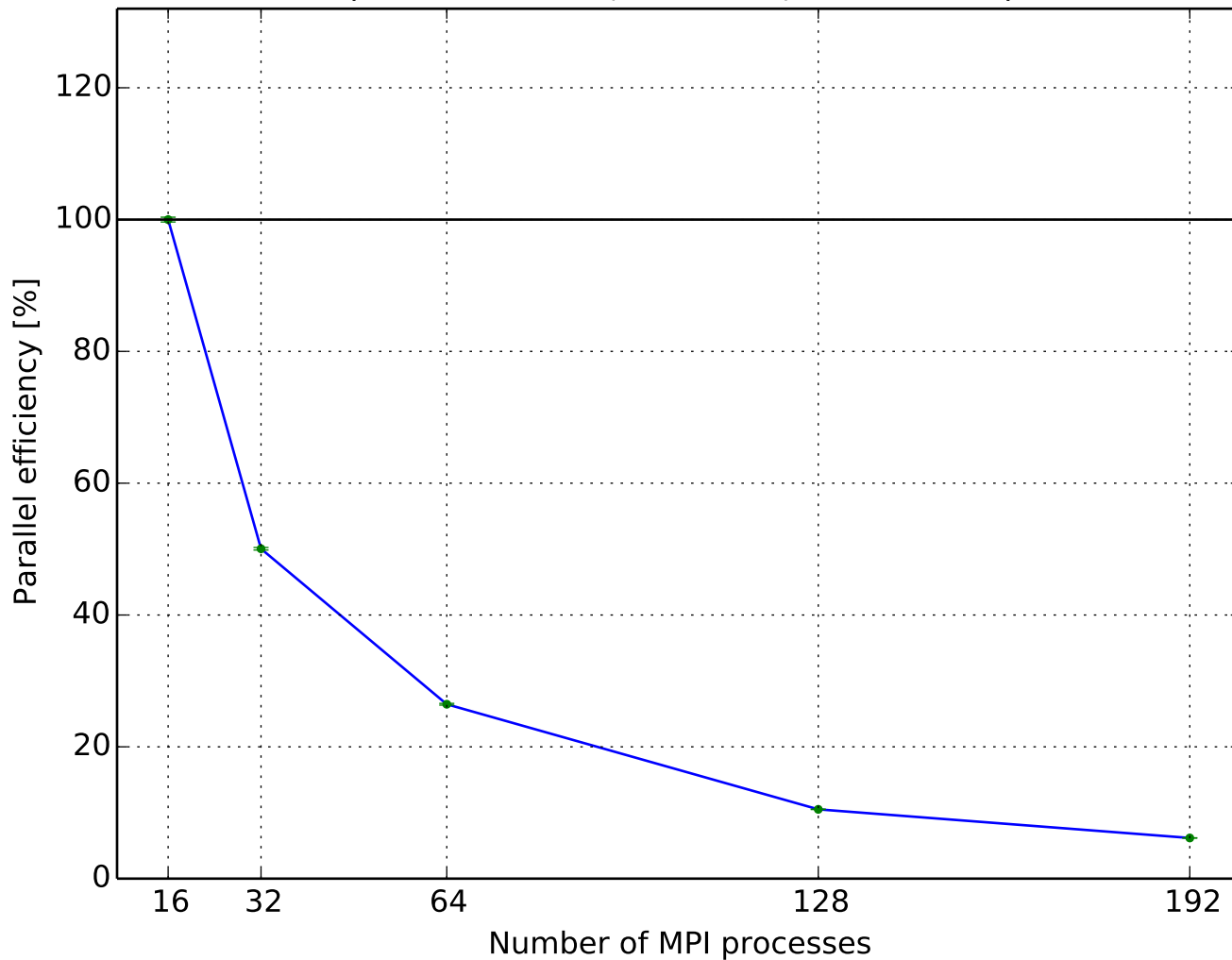
Execution time per time step
(0.3744M cells, laminar ,GAMG-FDIC)



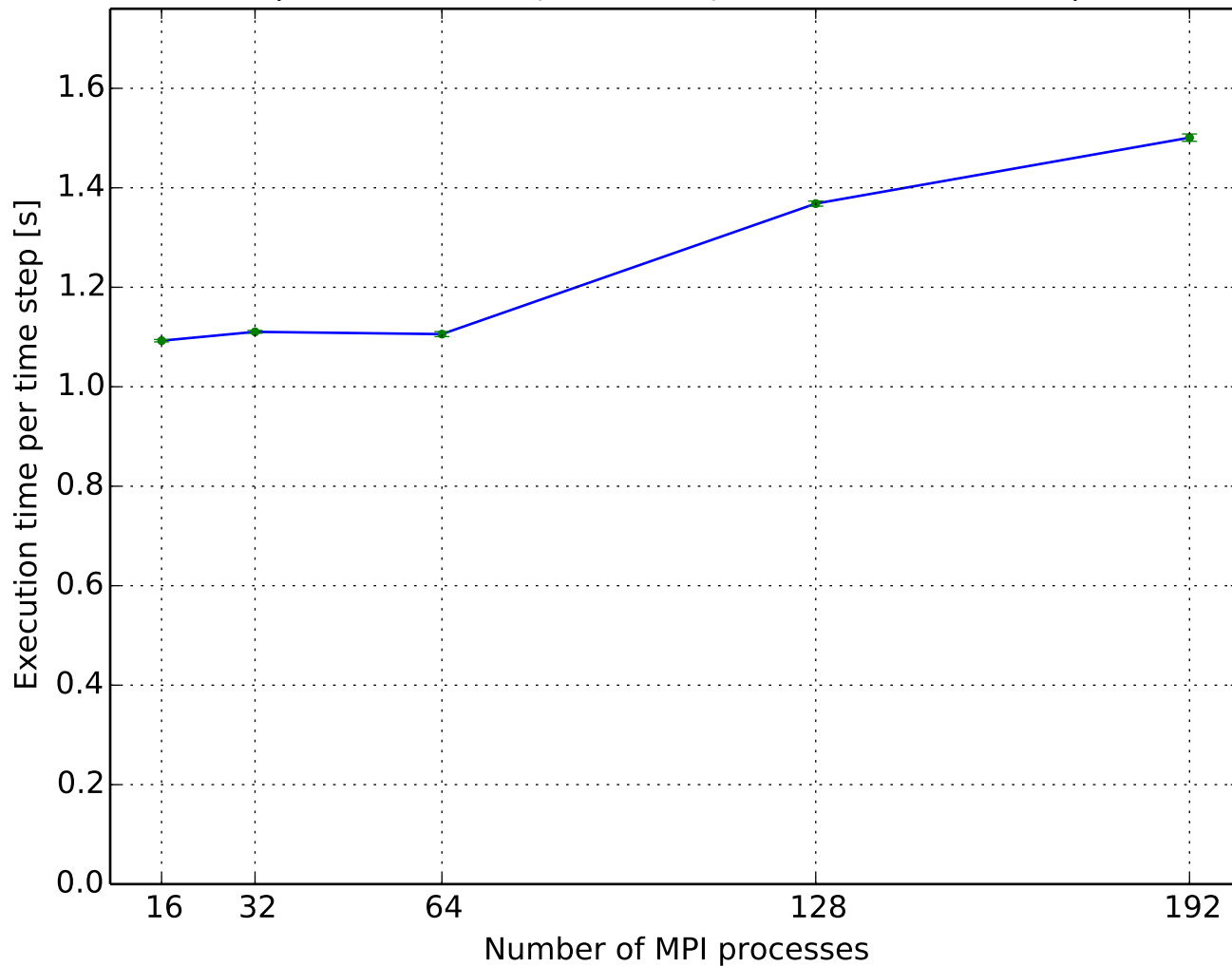
Speedup ratio
(0.3744M cells, laminar ,GAMG-FDIC)



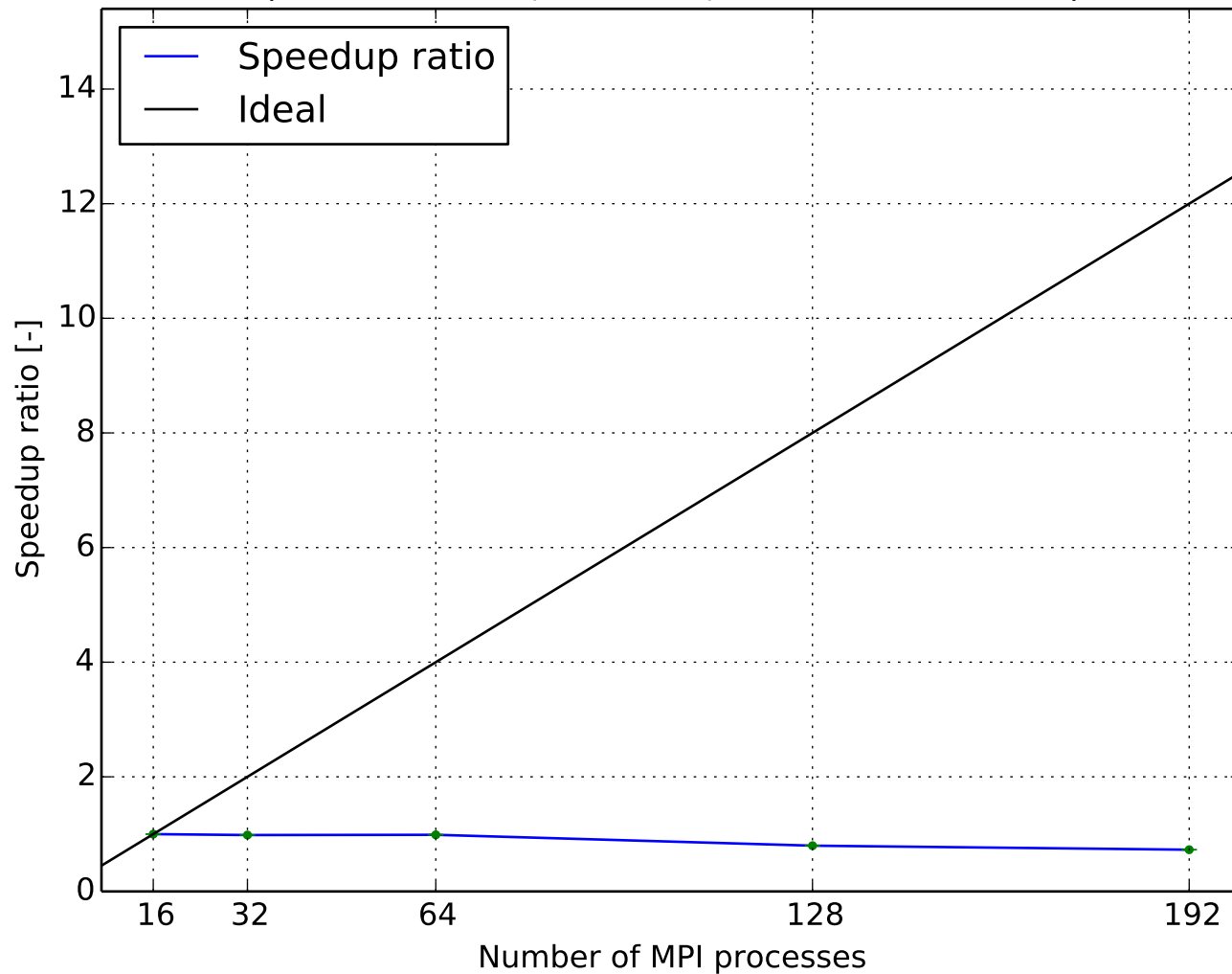
Parallel efficiency
(0.3744M cells, laminar ,GAMG-FDIC)



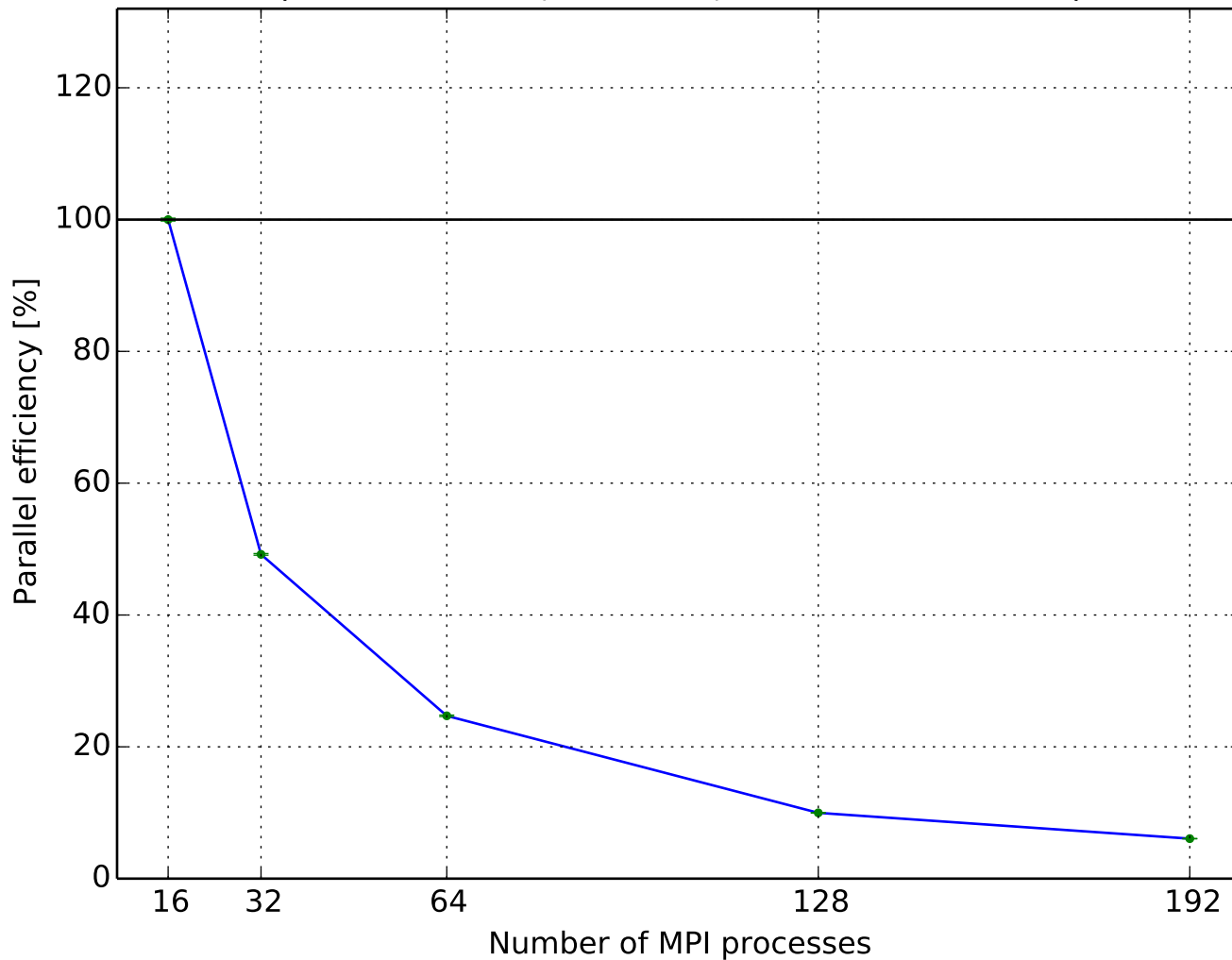
Execution time per time step
(0.3744M cells, laminar ,GAMG-GaussSeidel)



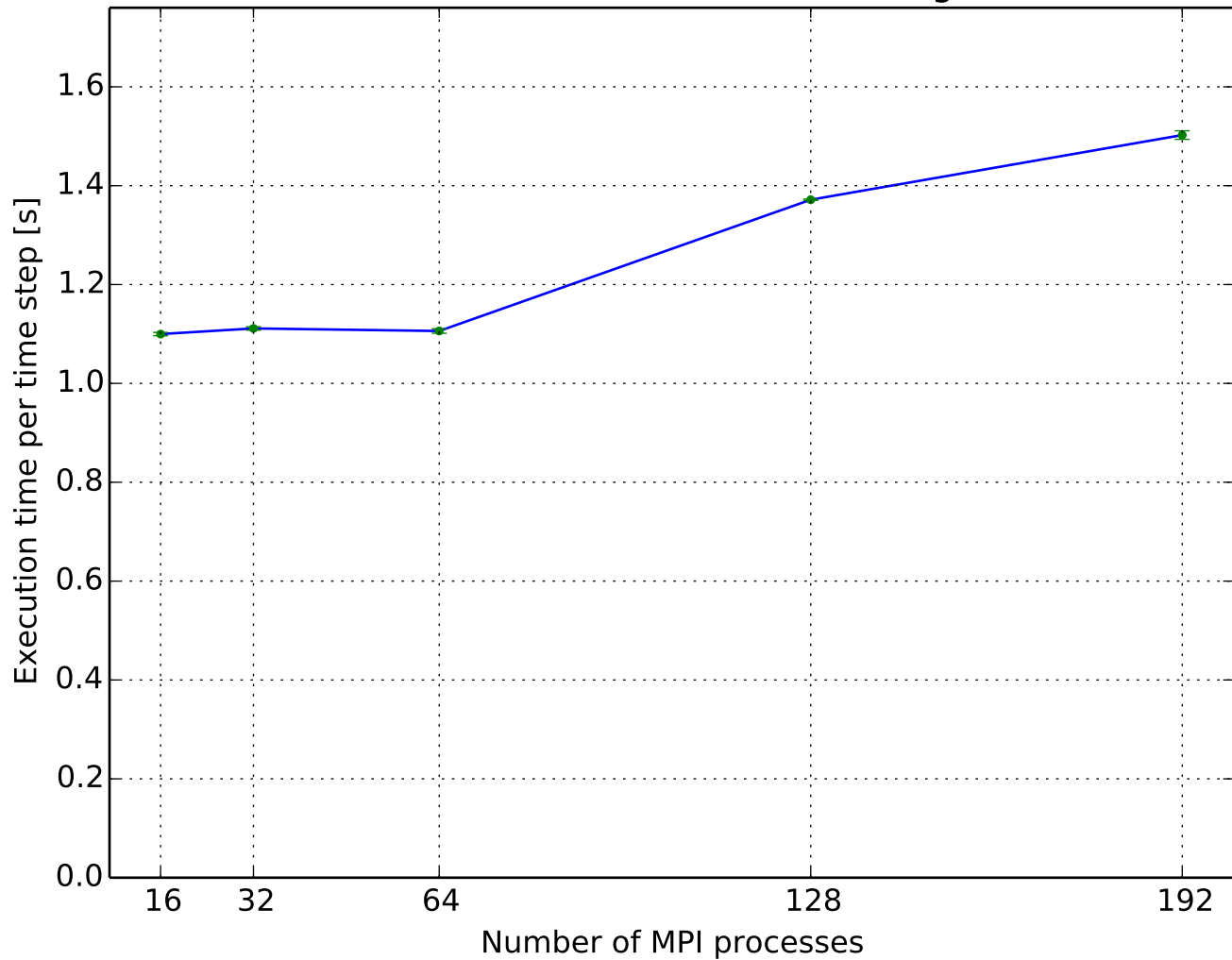
Speedup ratio
(0.3744M cells, laminar ,GAMG-GaussSeidel)



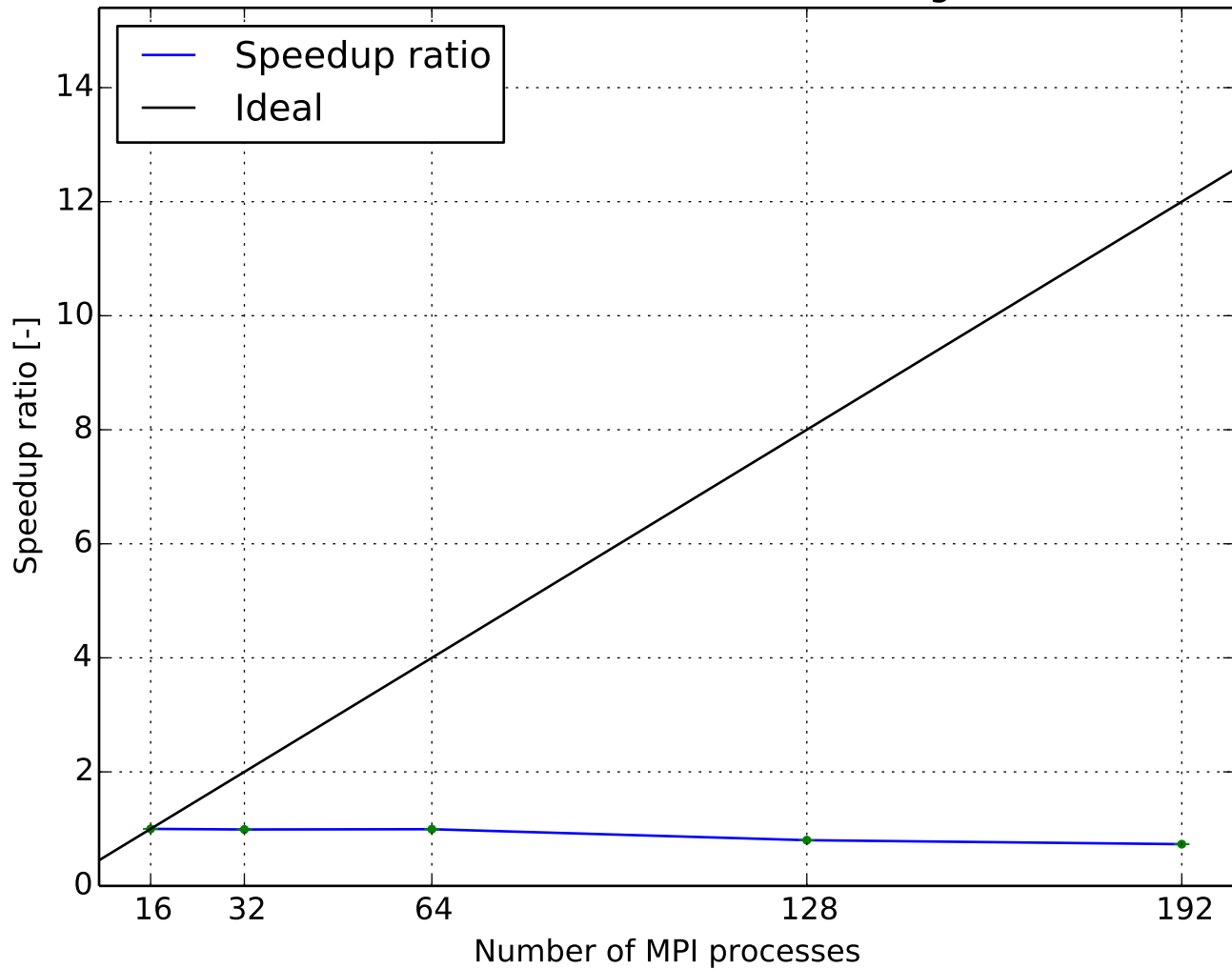
Parallel efficiency
(0.3744M cells, laminar ,GAMG-GaussSeidel)



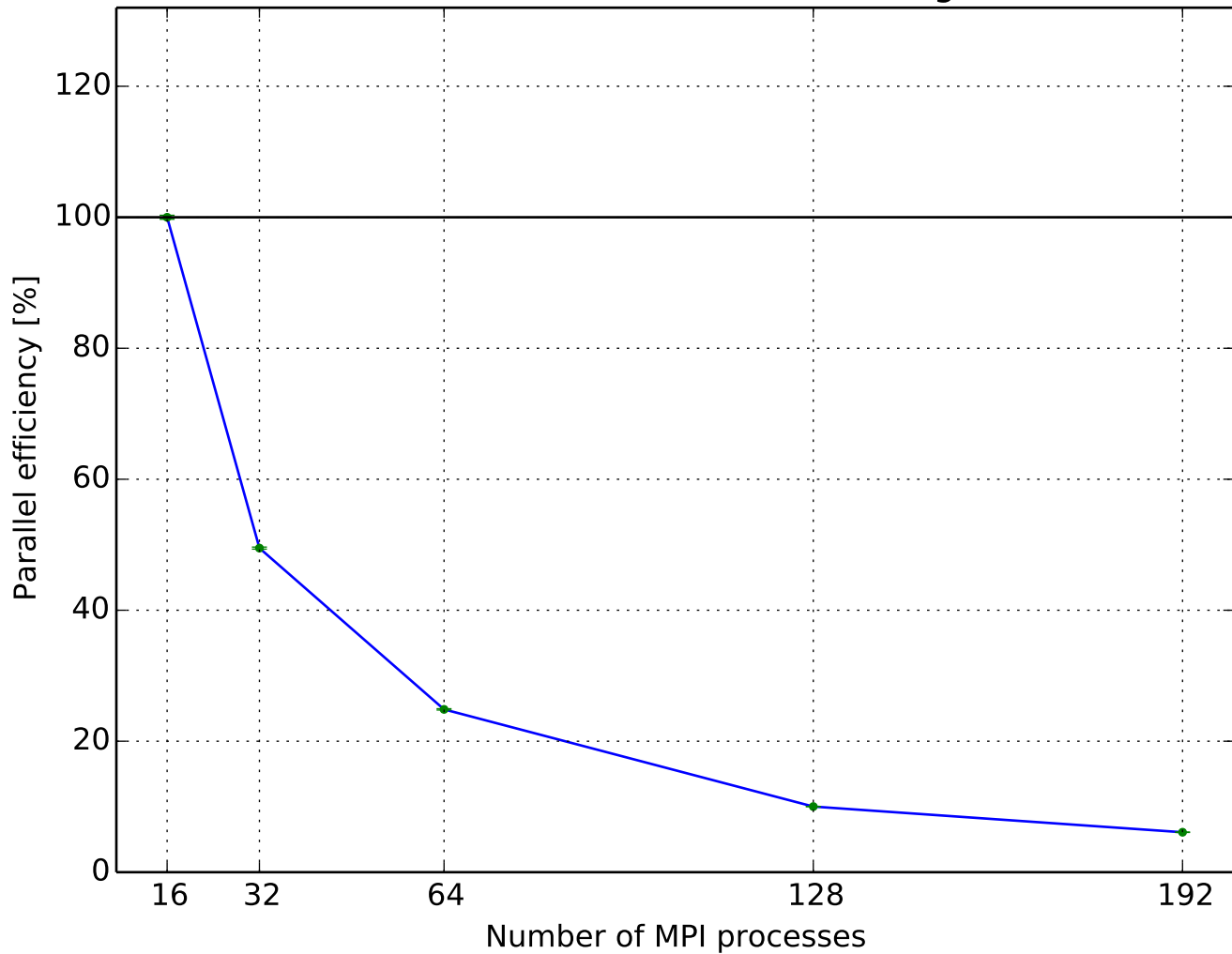
Execution time per time step
(0.3744M cells, laminar ,GAMG-nonBlockingGaussSeidel)



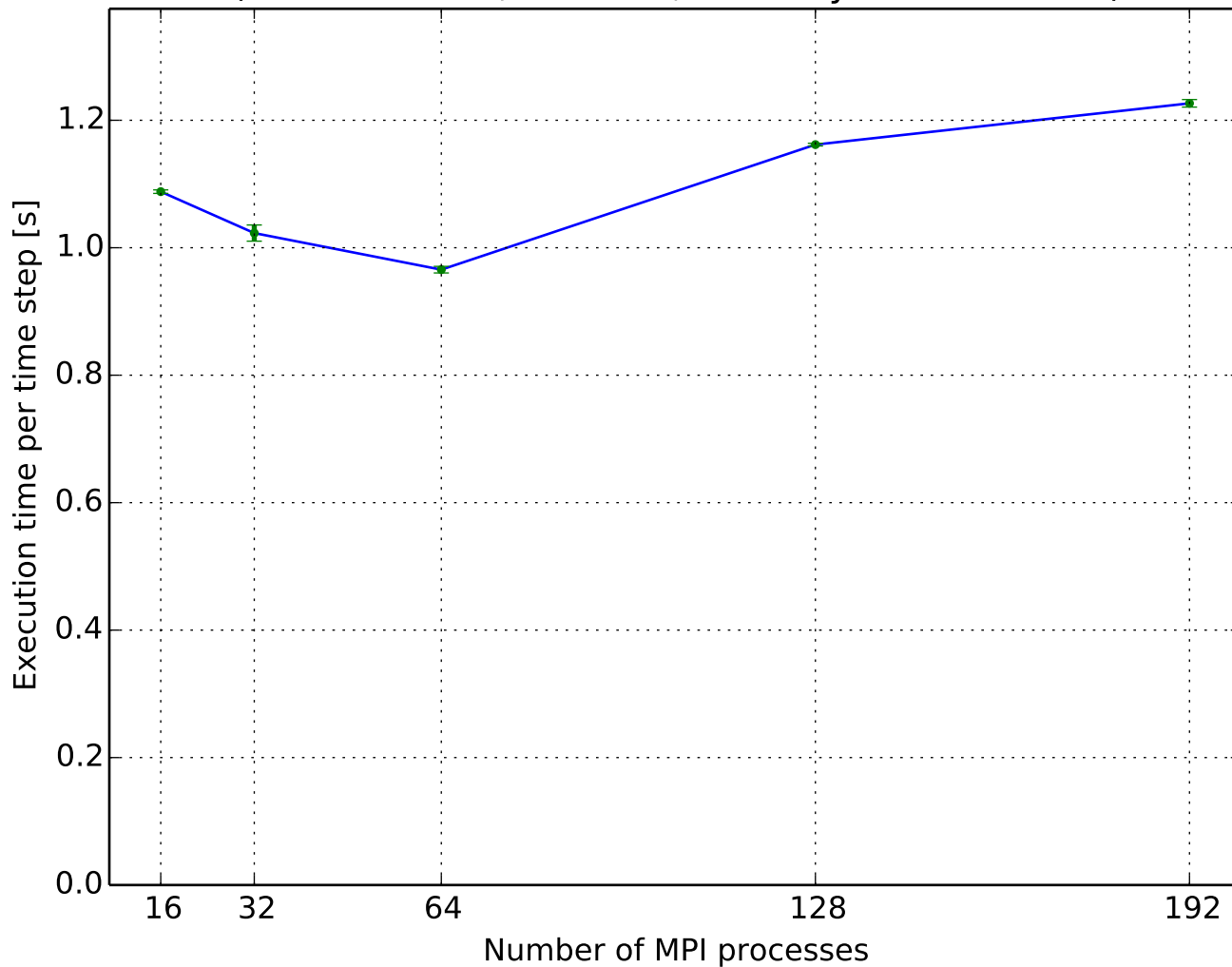
Speedup ratio
(0.3744M cells, laminar ,GAMG-nonBlockingGaussSeidel)



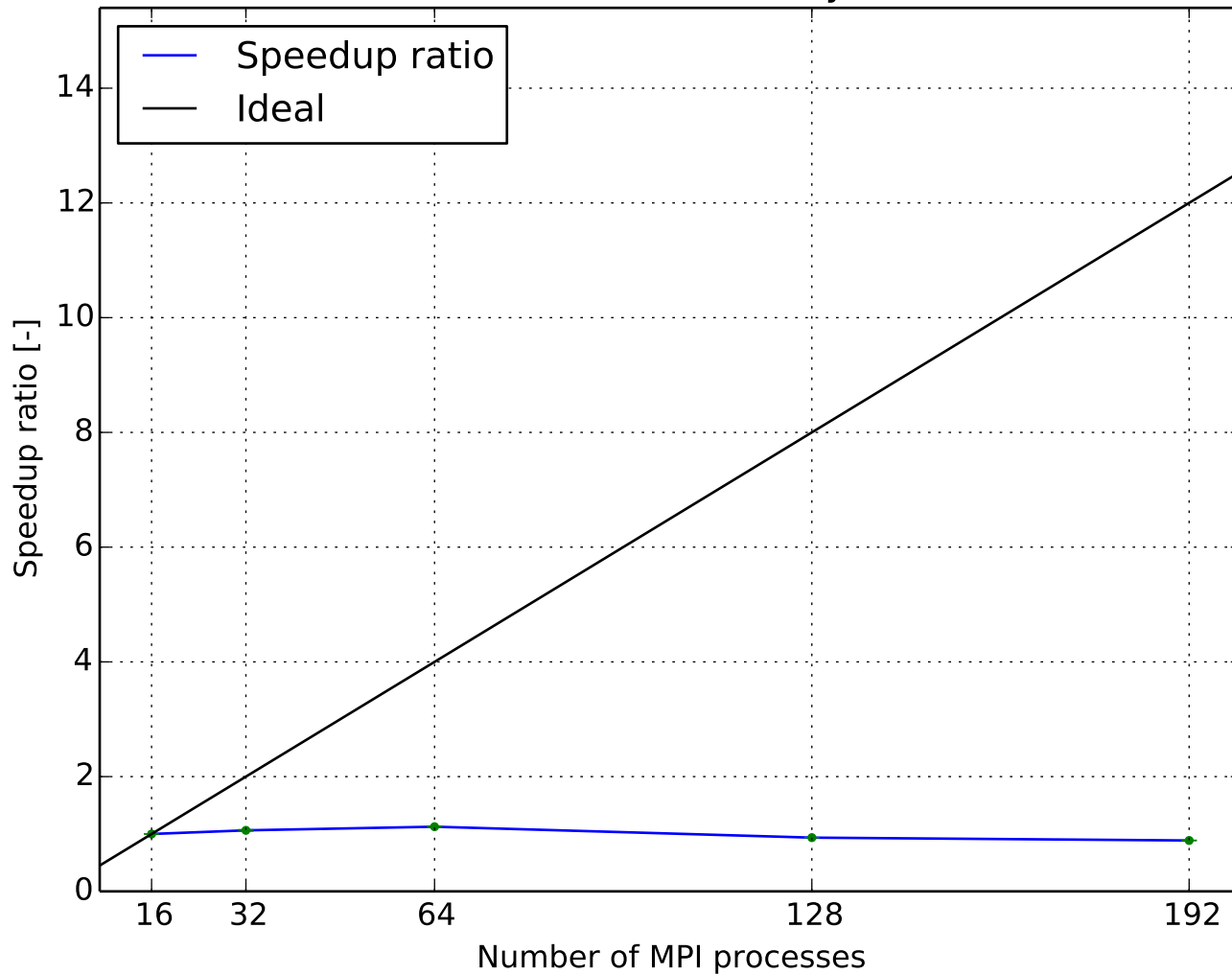
Parallel efficiency
(0.3744M cells, laminar ,GAMG-nonBlockingGaussSeidel)



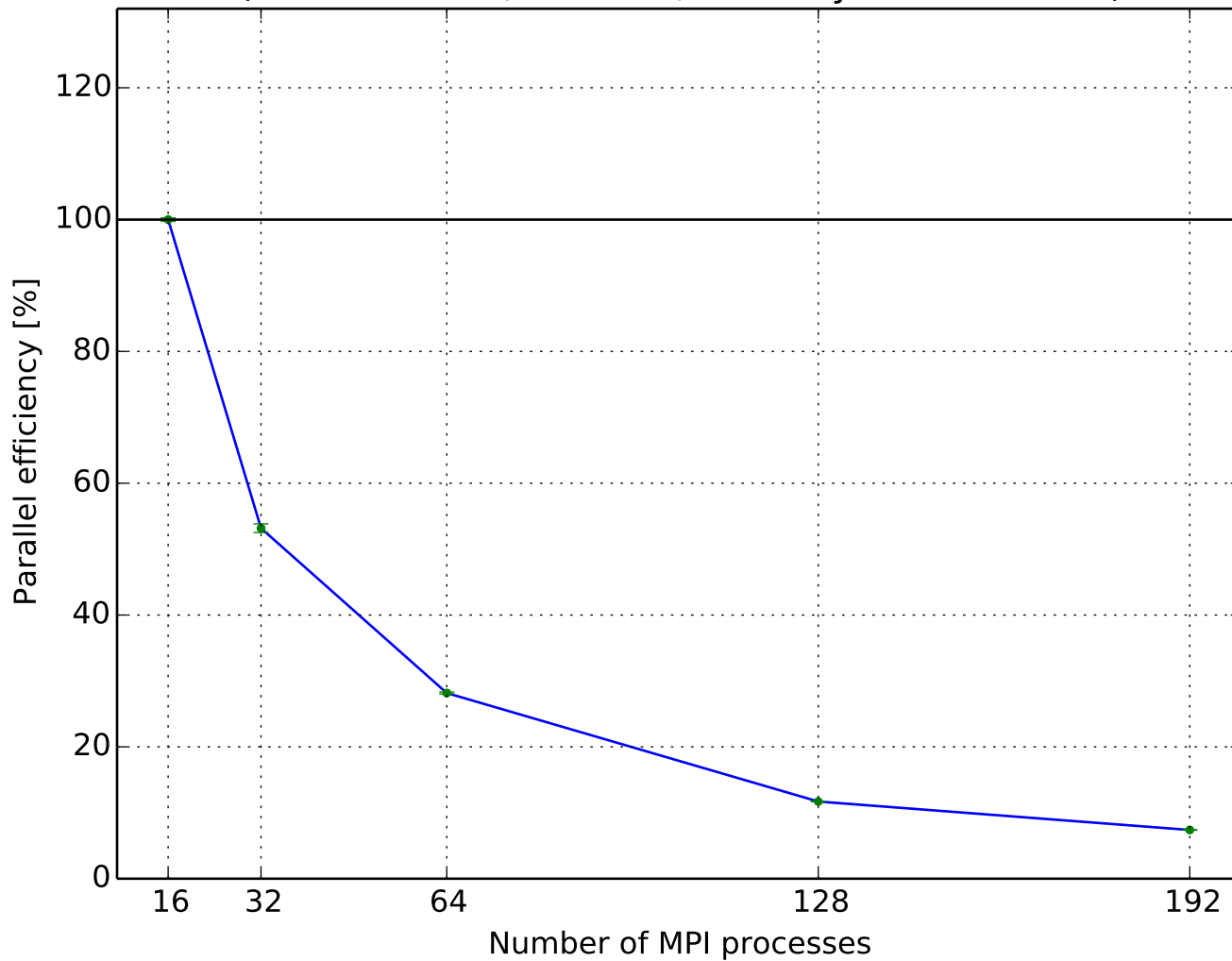
Execution time per time step
(0.3744M cells, laminar ,GAMG-symGaussSeidel)



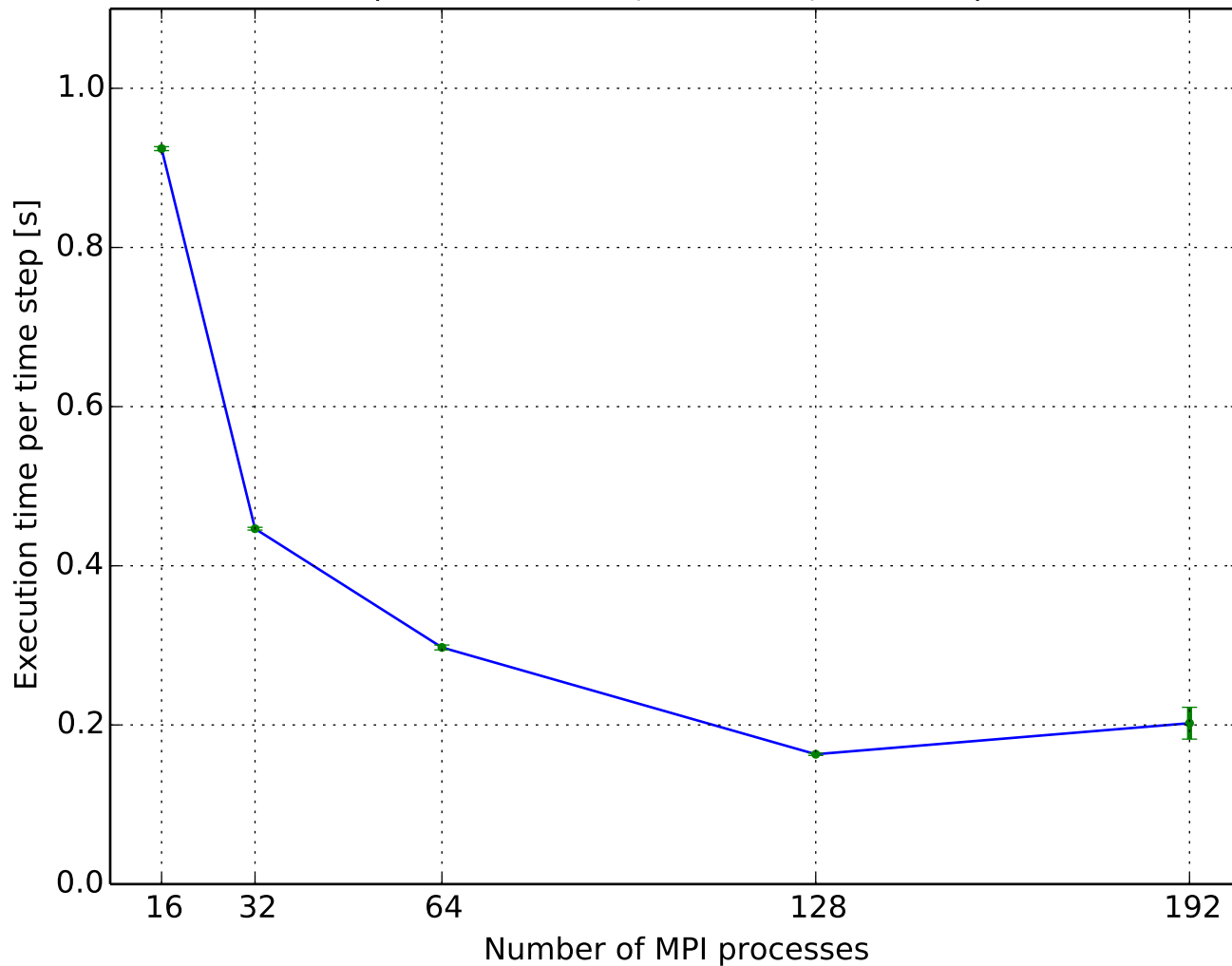
Speedup ratio
(0.3744M cells, laminar ,GAMG-symGaussSeidel)



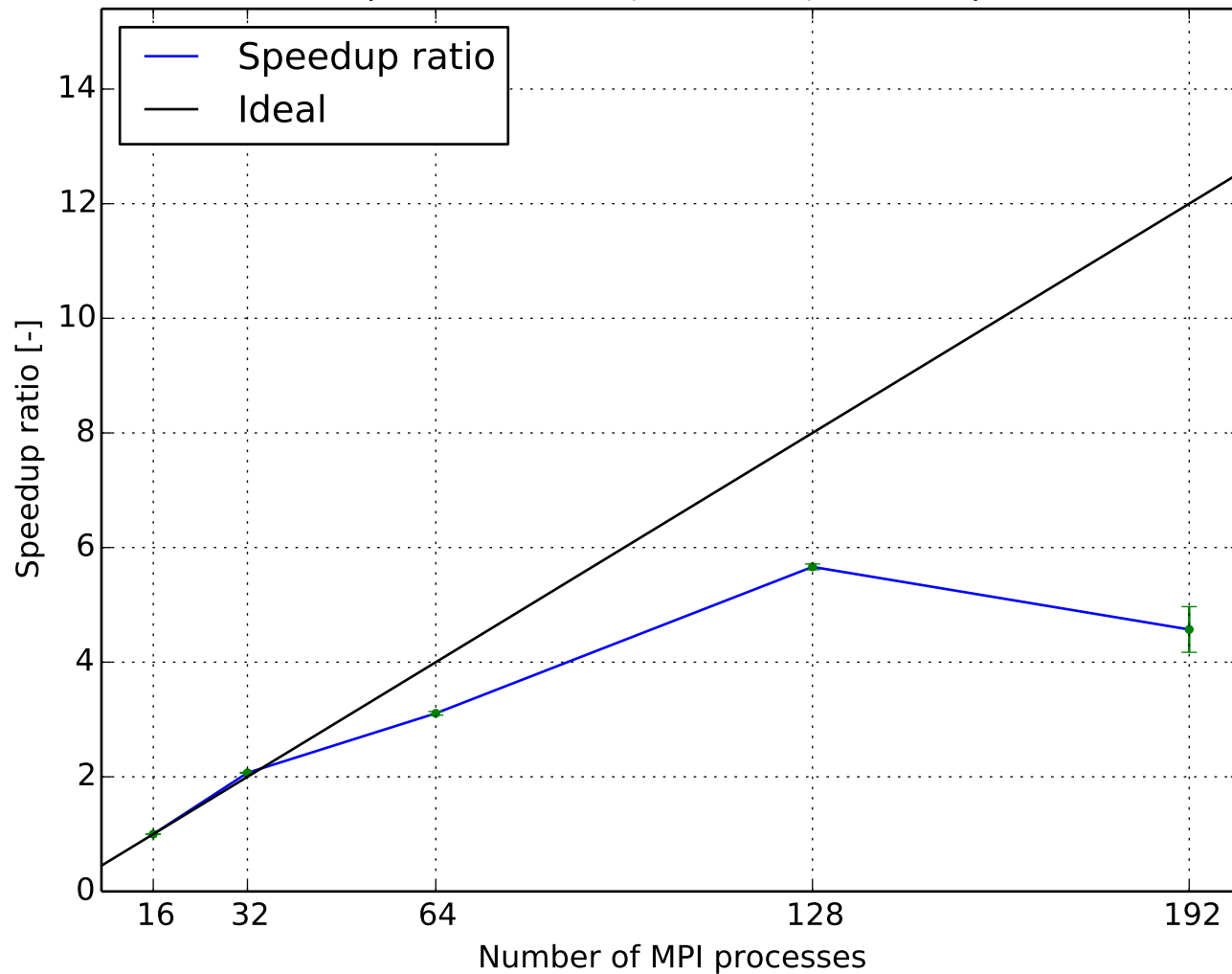
Parallel efficiency
(0.3744M cells, laminar ,GAMG-symGaussSeidel)



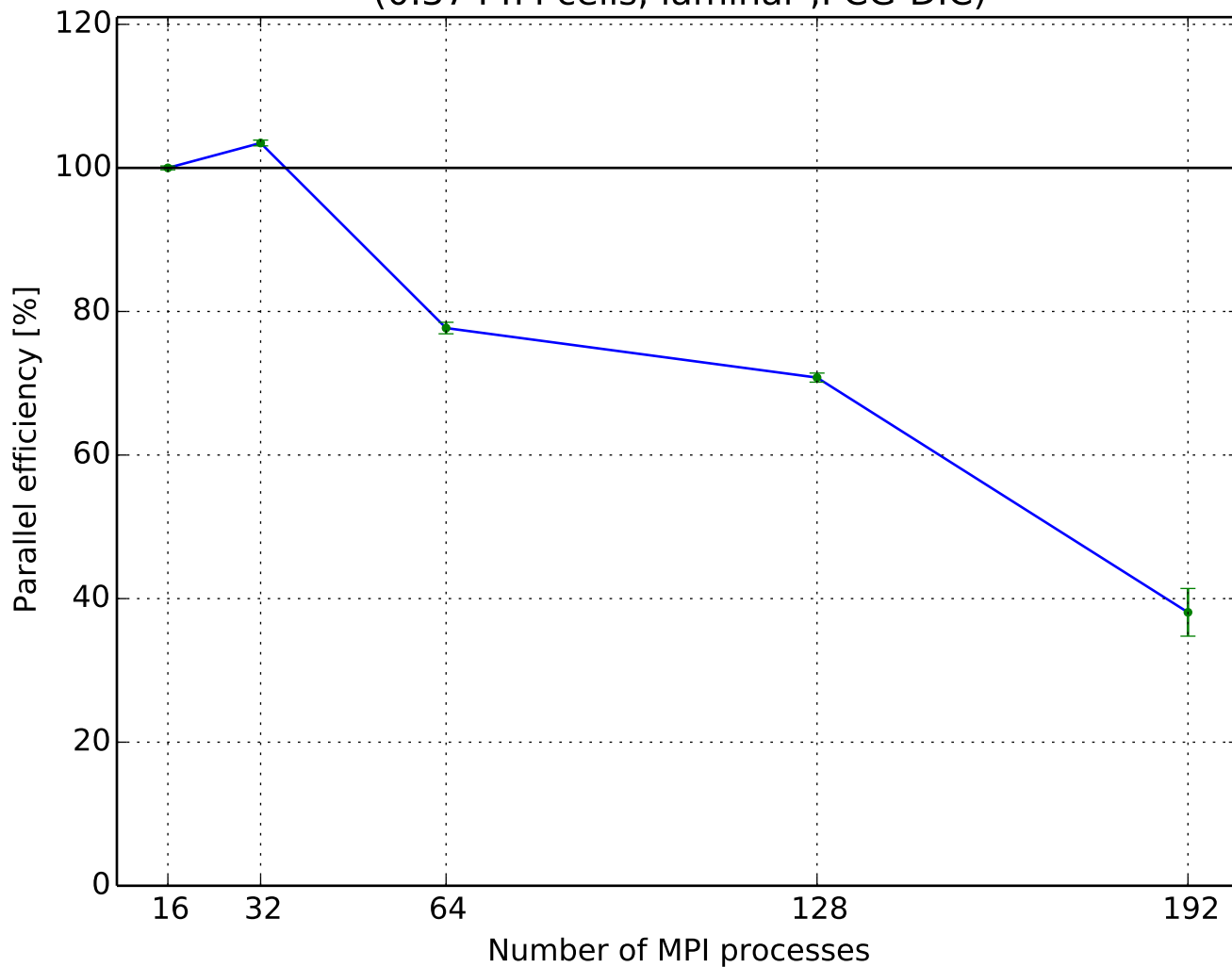
Execution time per time step
(0.3744M cells, laminar ,PCG-DIC)



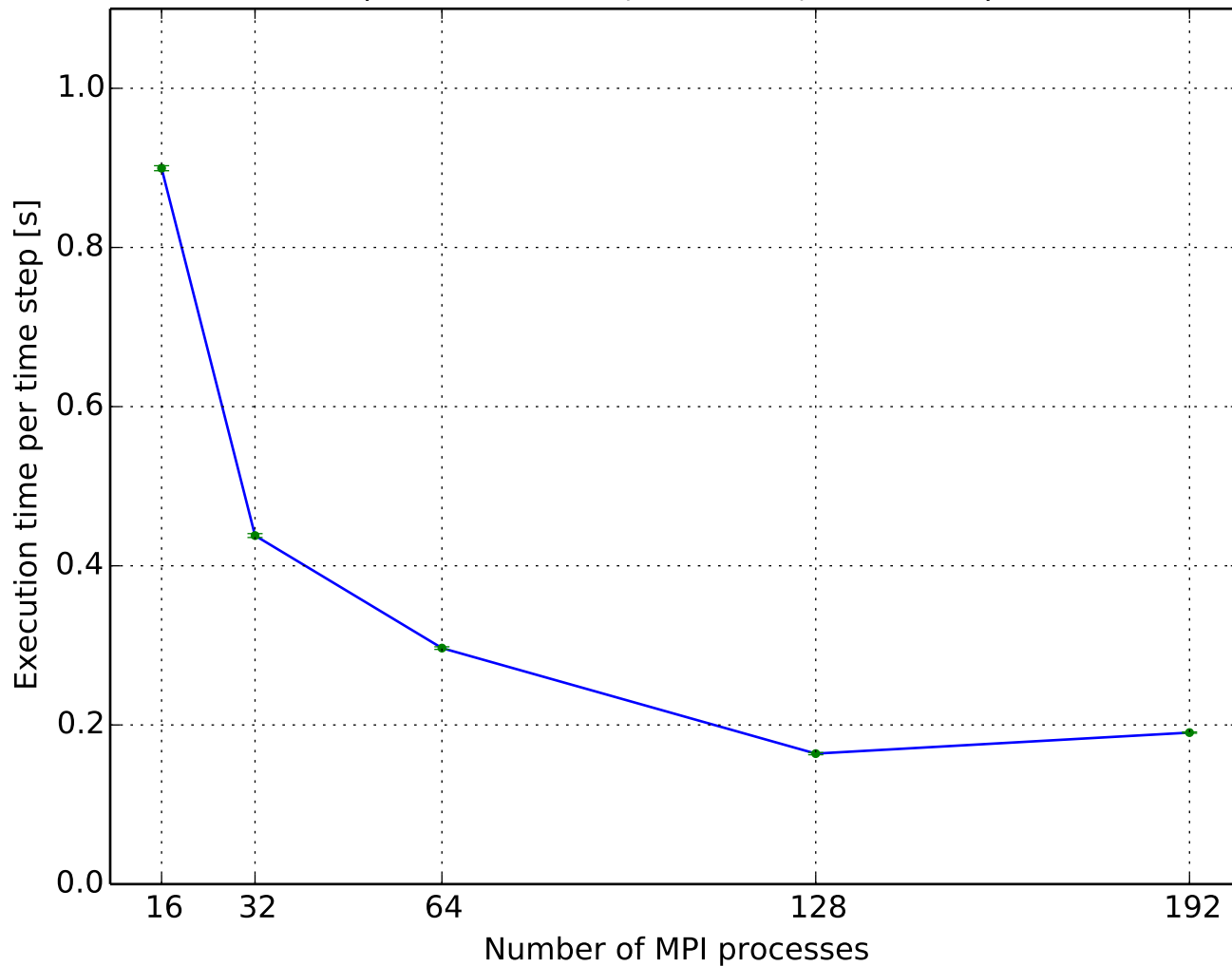
Speedup ratio
(0.3744M cells, laminar ,PCG-DIC)



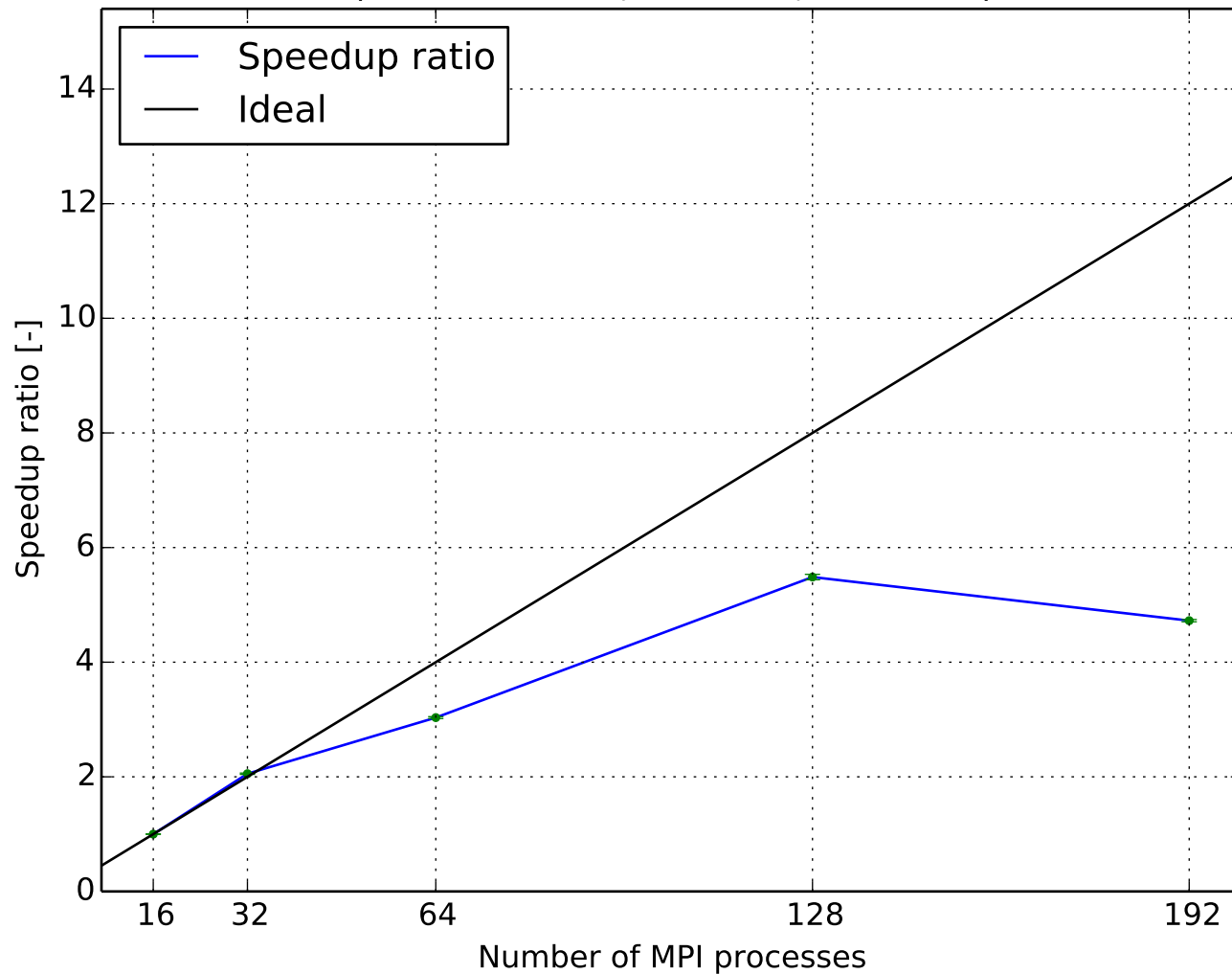
Parallel efficiency
(0.3744M cells, laminar ,PCG-DIC)



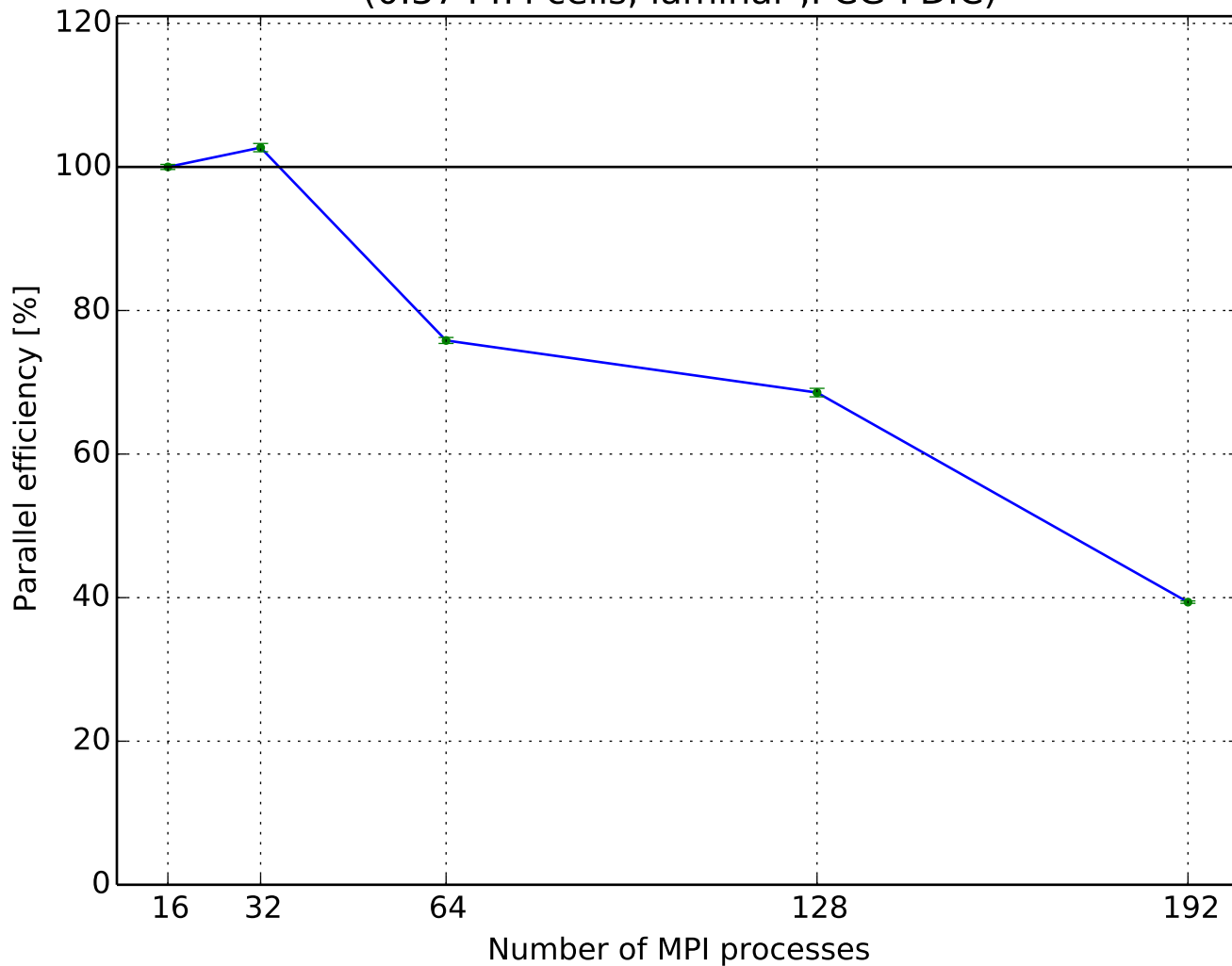
Execution time per time step
(0.3744M cells, laminar ,PCG-FDIC)



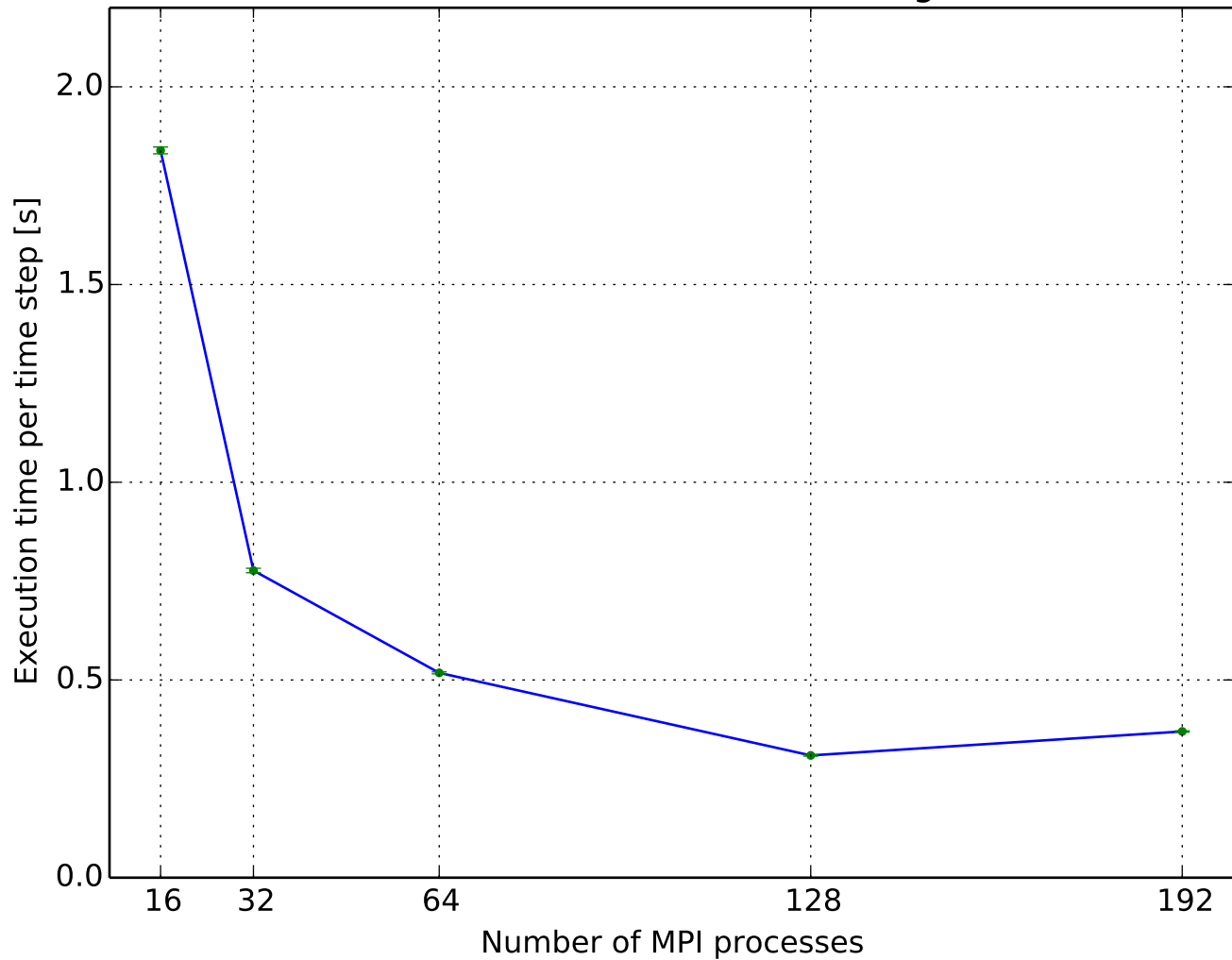
Speedup ratio
(0.3744M cells, laminar ,PCG-FDIC)



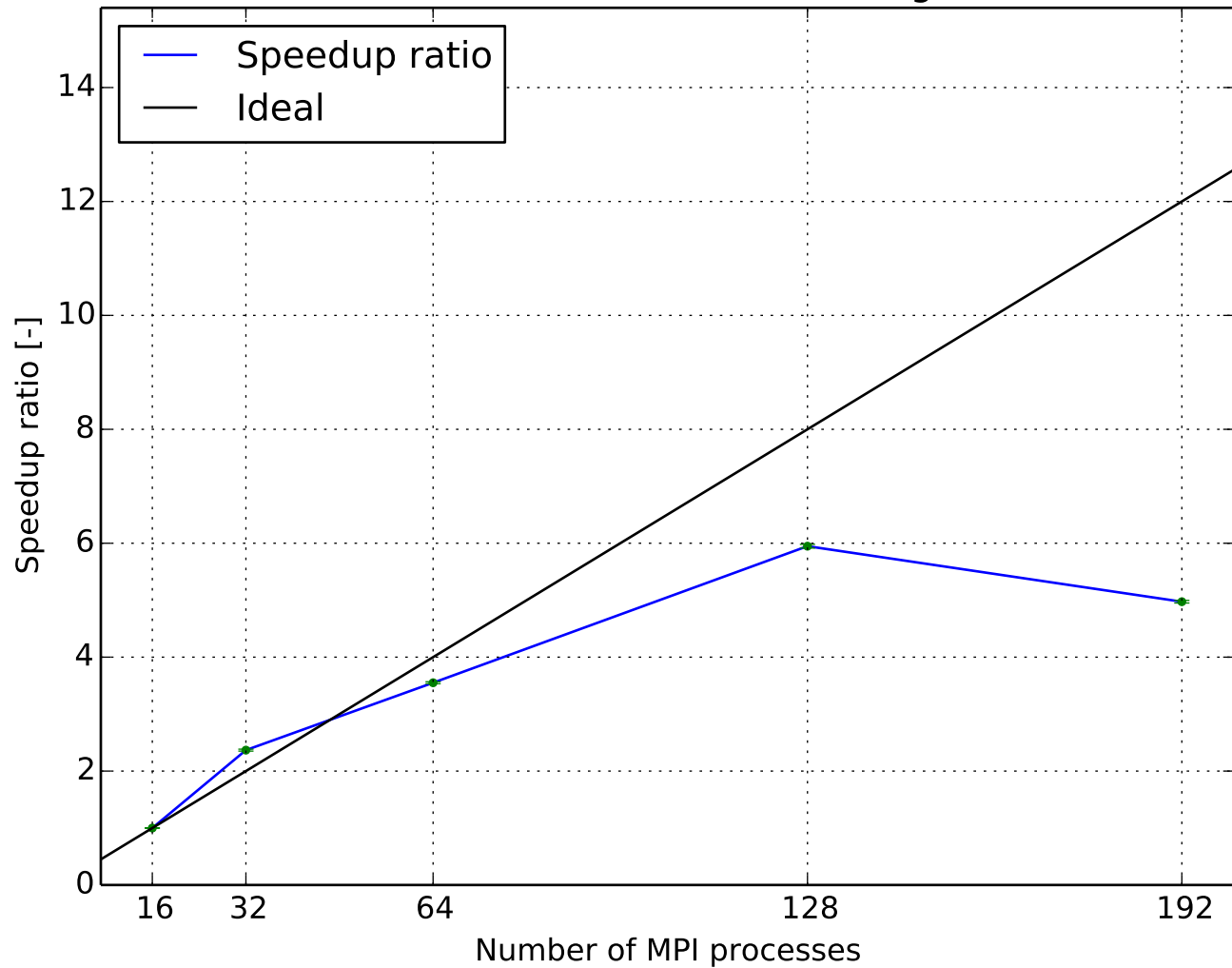
Parallel efficiency
(0.3744M cells, laminar ,PCG-FDIC)



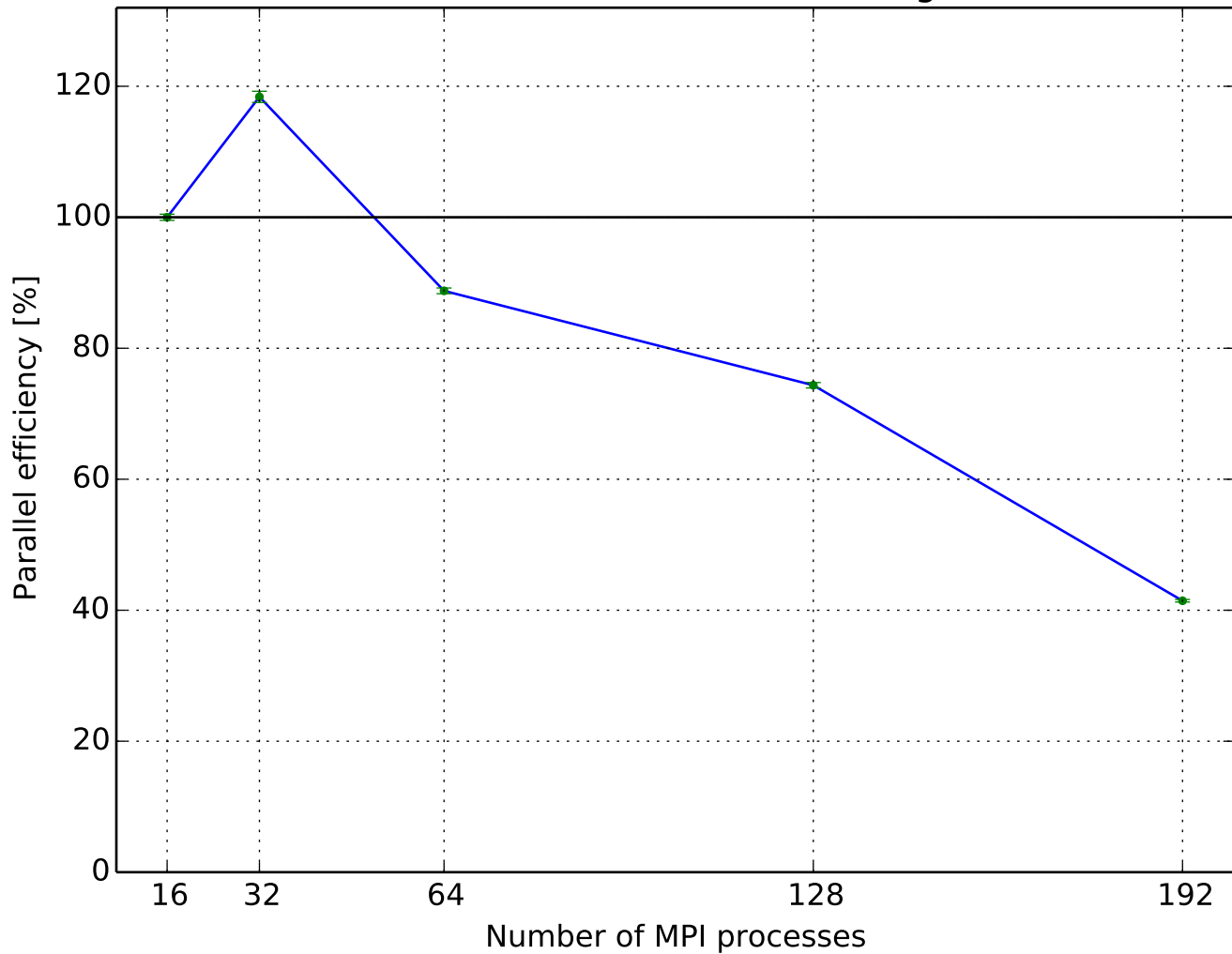
Execution time per time step
(0.3744M cells, laminar ,PCG-diagonal)



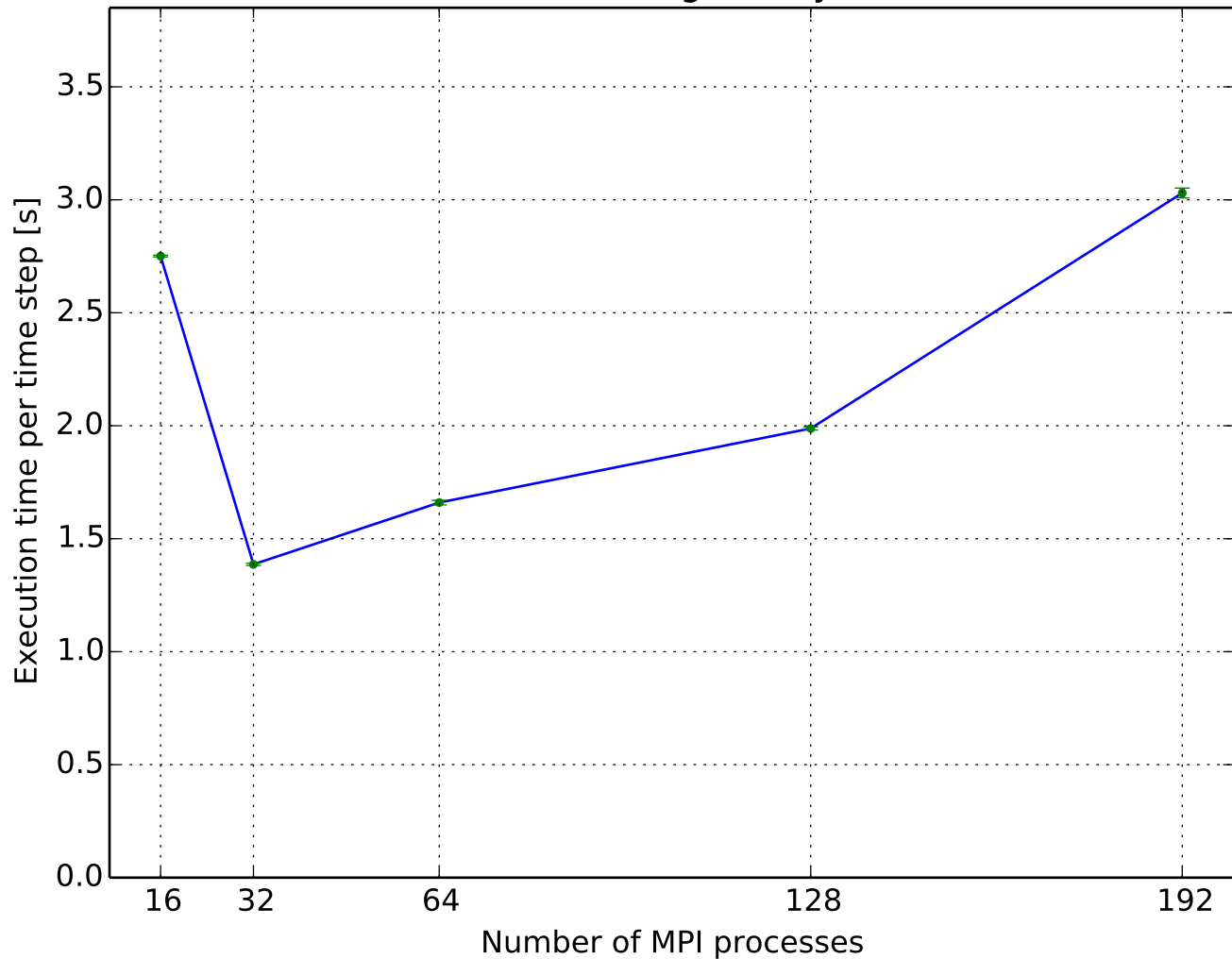
Speedup ratio
(0.3744M cells, laminar ,PCG-diagonal)



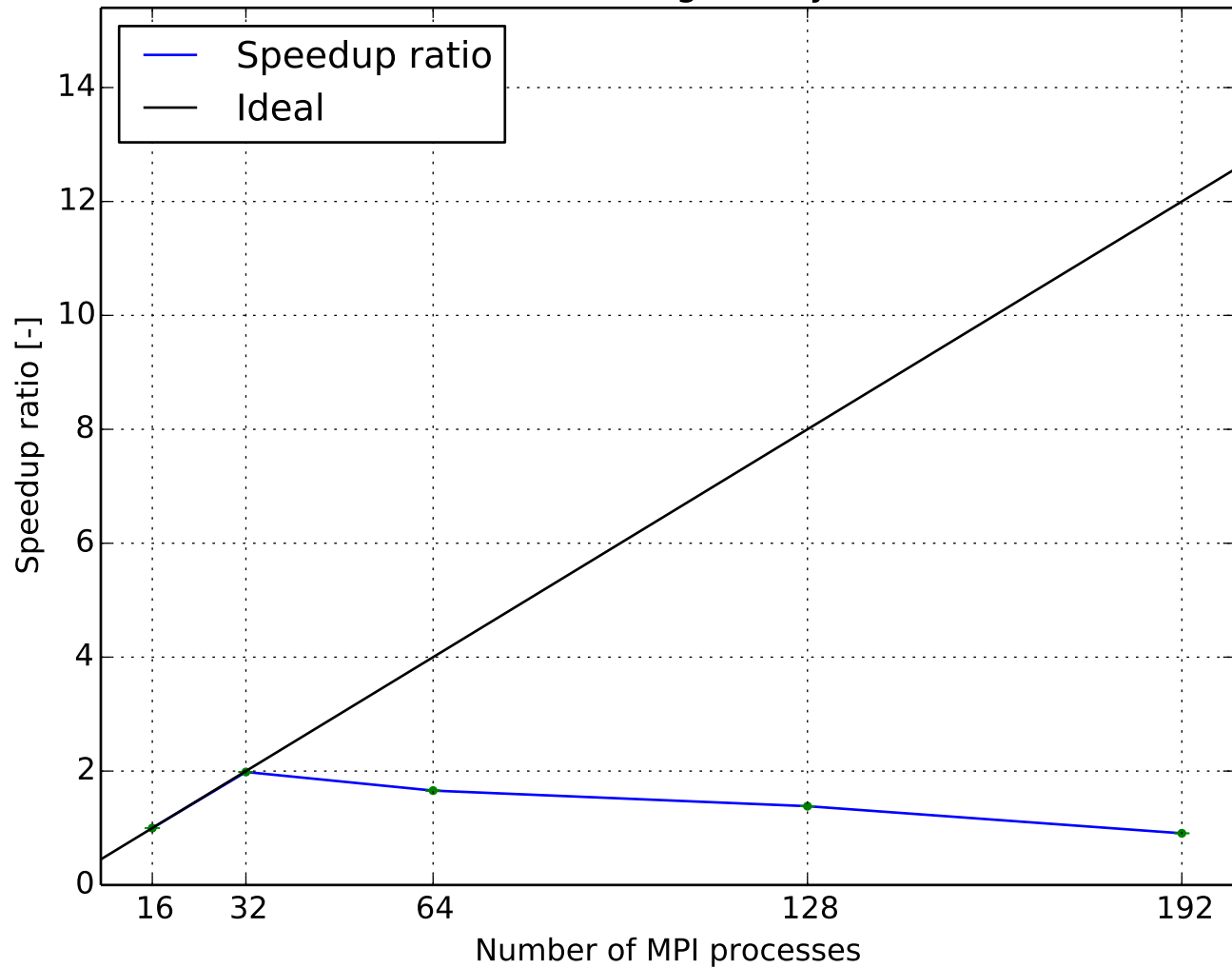
Parallel efficiency
(0.3744M cells, laminar ,PCG-diagonal)



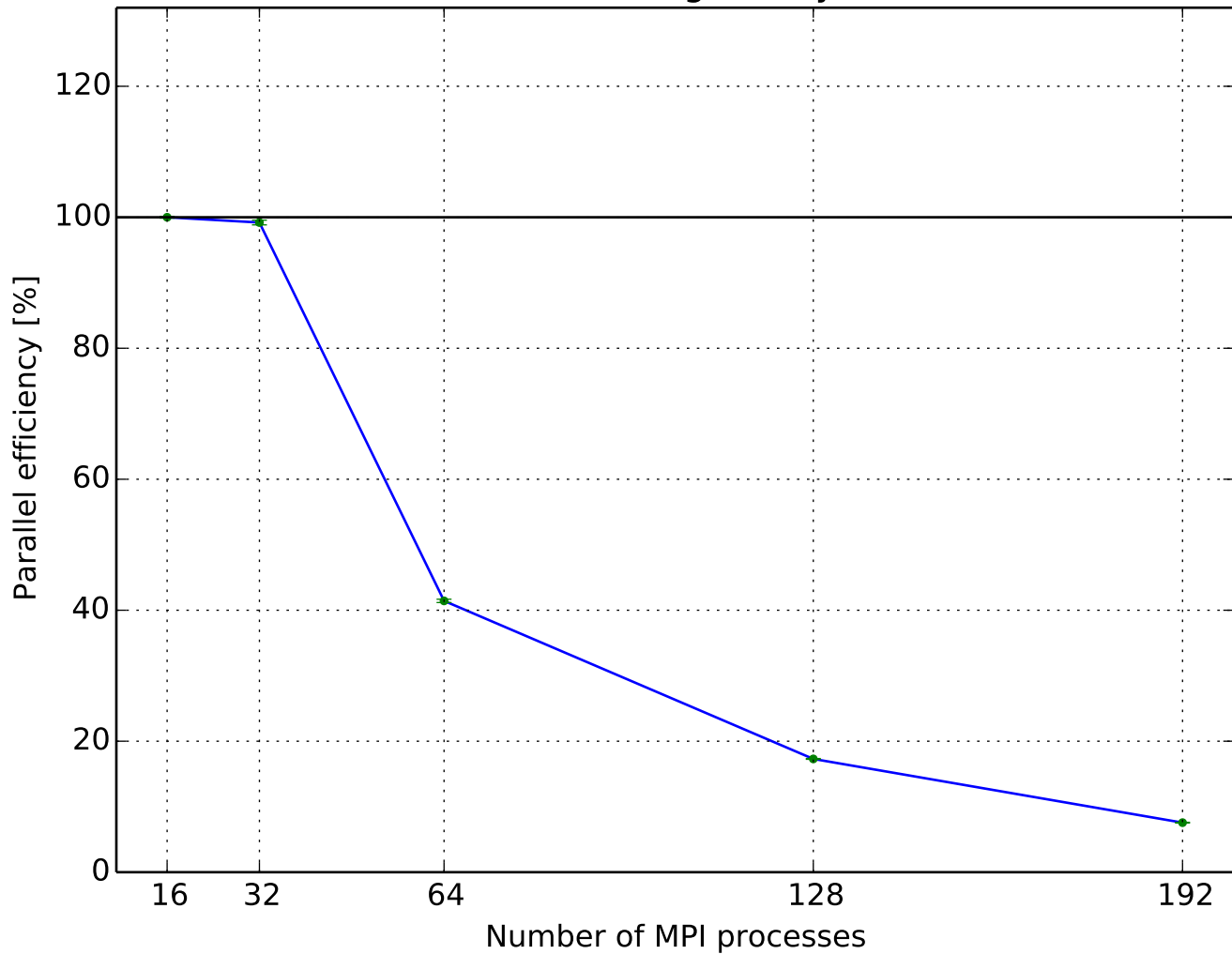
Execution time per time step
(0.74292M cells, Smagorinsky ,GAMG-DIC)



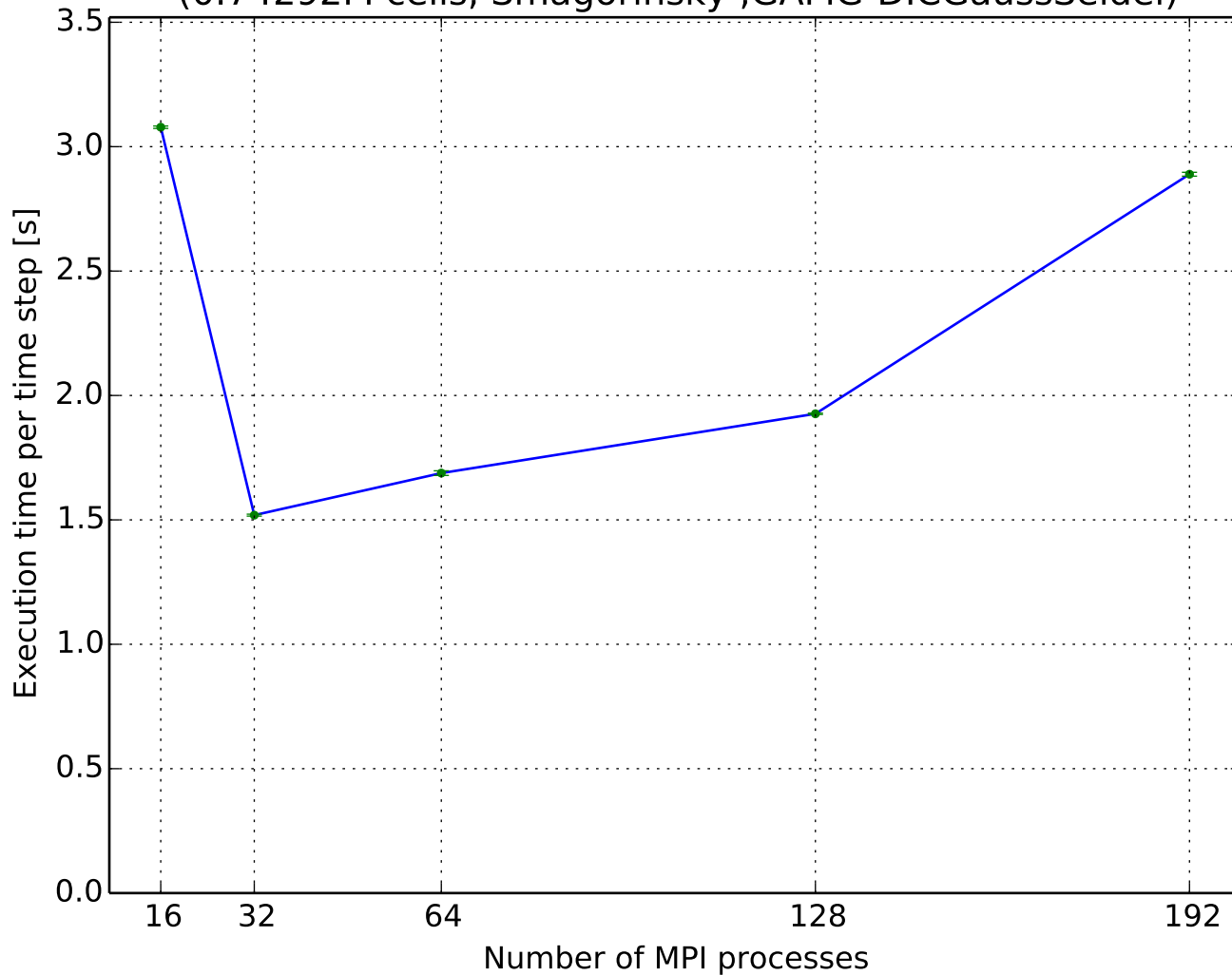
Speedup ratio
(0.74292M cells, Smagorinsky ,GAMG-DIC)



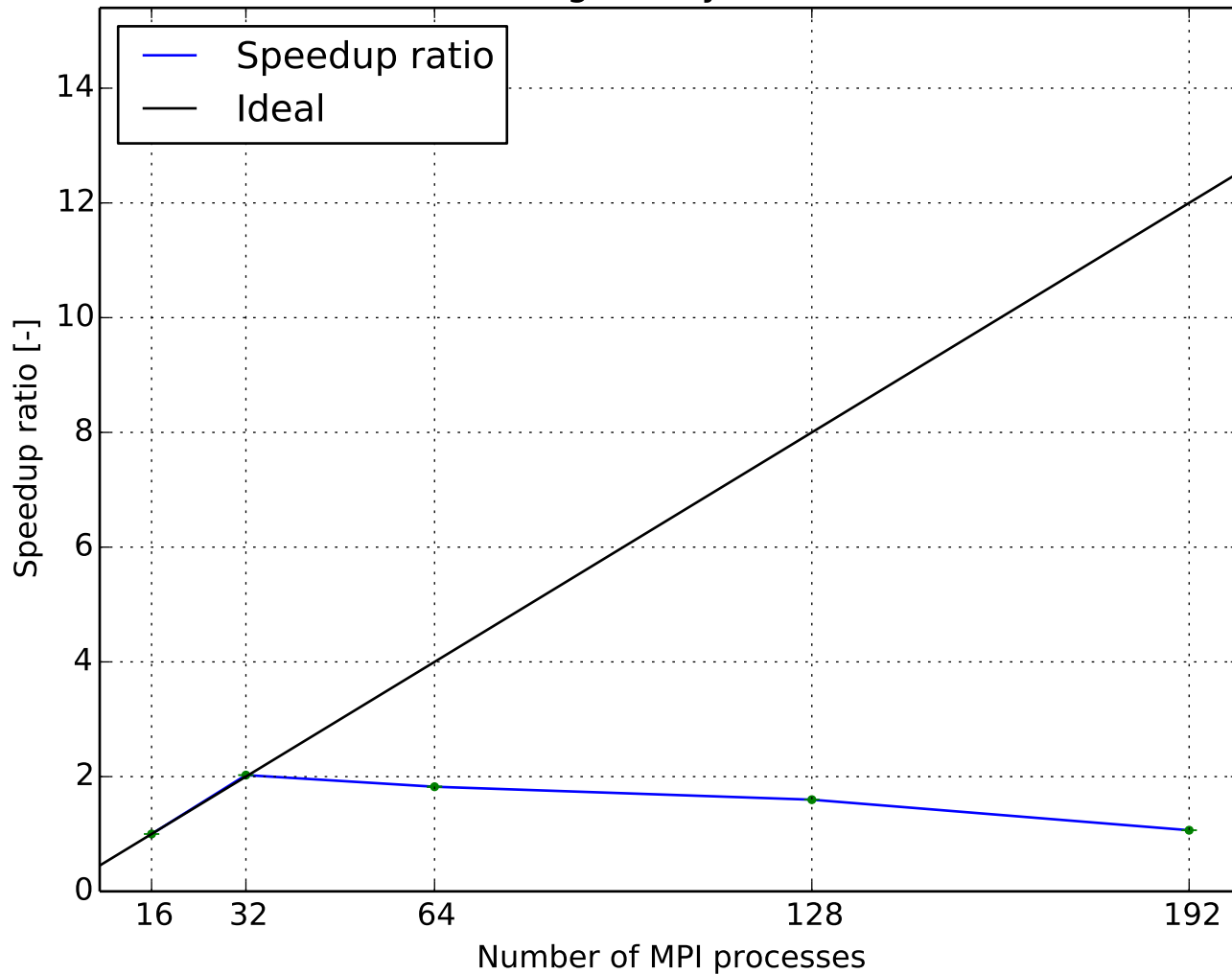
Parallel efficiency
(0.74292M cells, Smagorinsky ,GAMG-DIC)



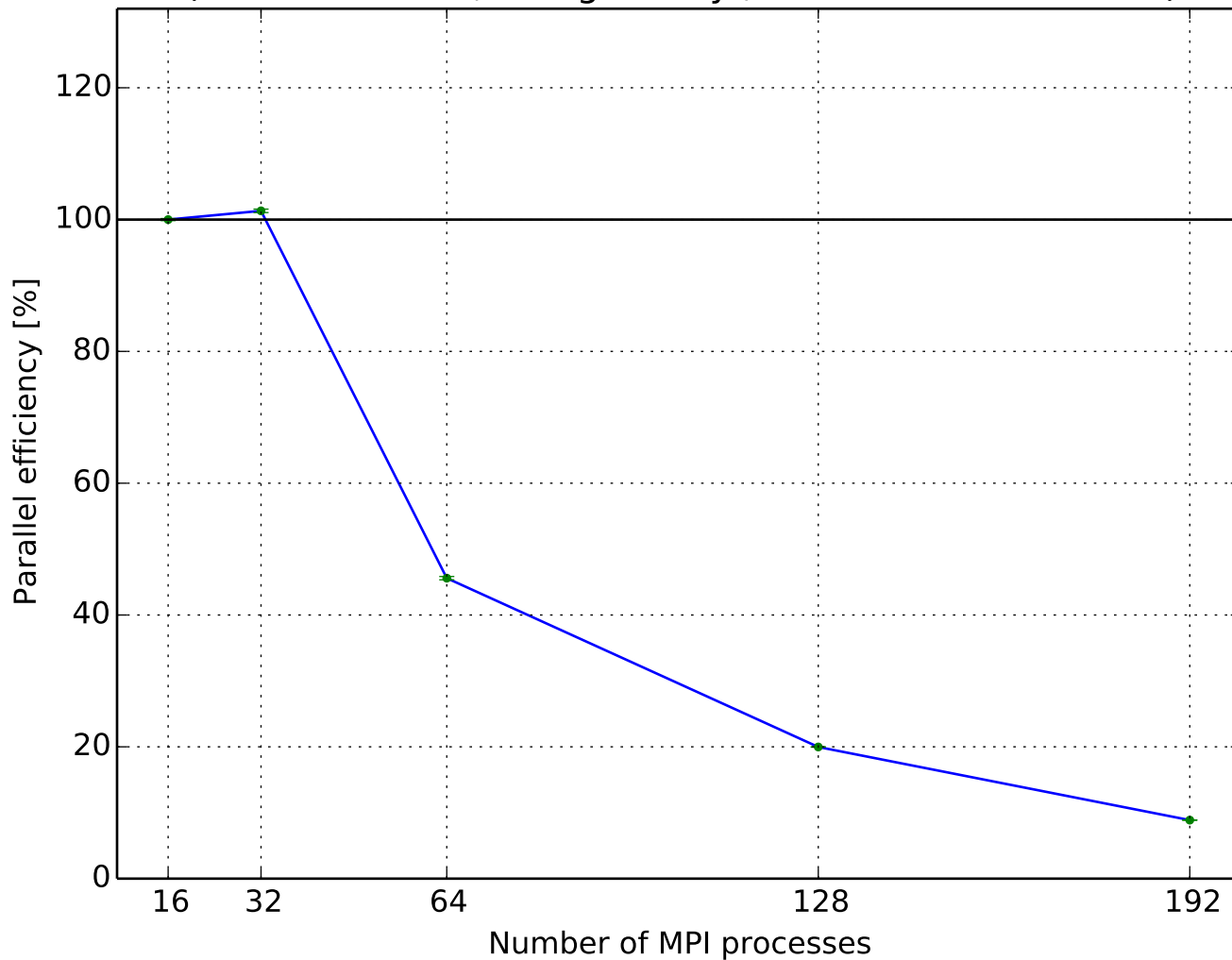
Execution time per time step
(0.74292M cells, Smagorinsky ,GAMG-DICGaussSeidel)



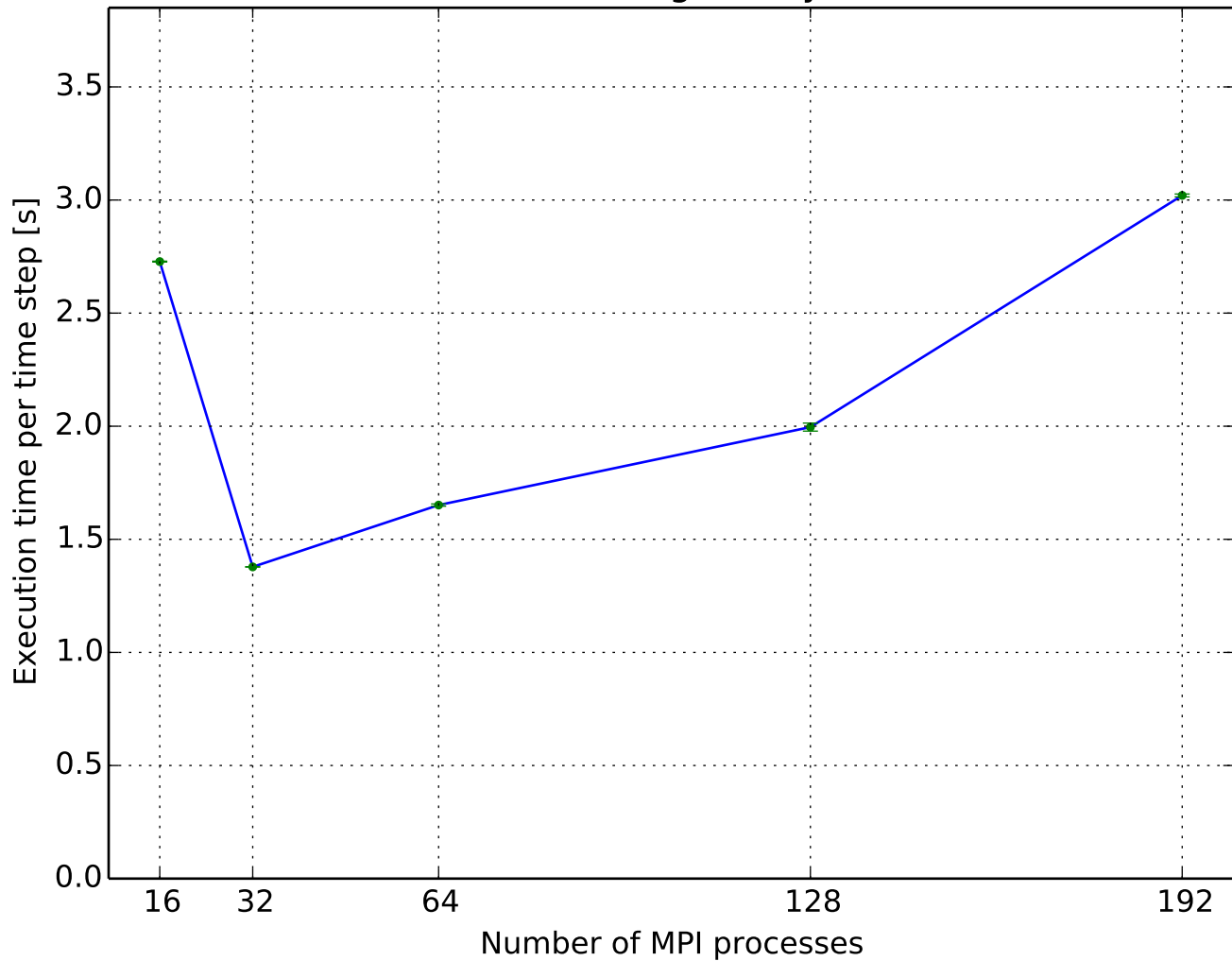
Speedup ratio
(0.74292M cells, Smagorinsky ,GAMG-DICGaussSeidel)



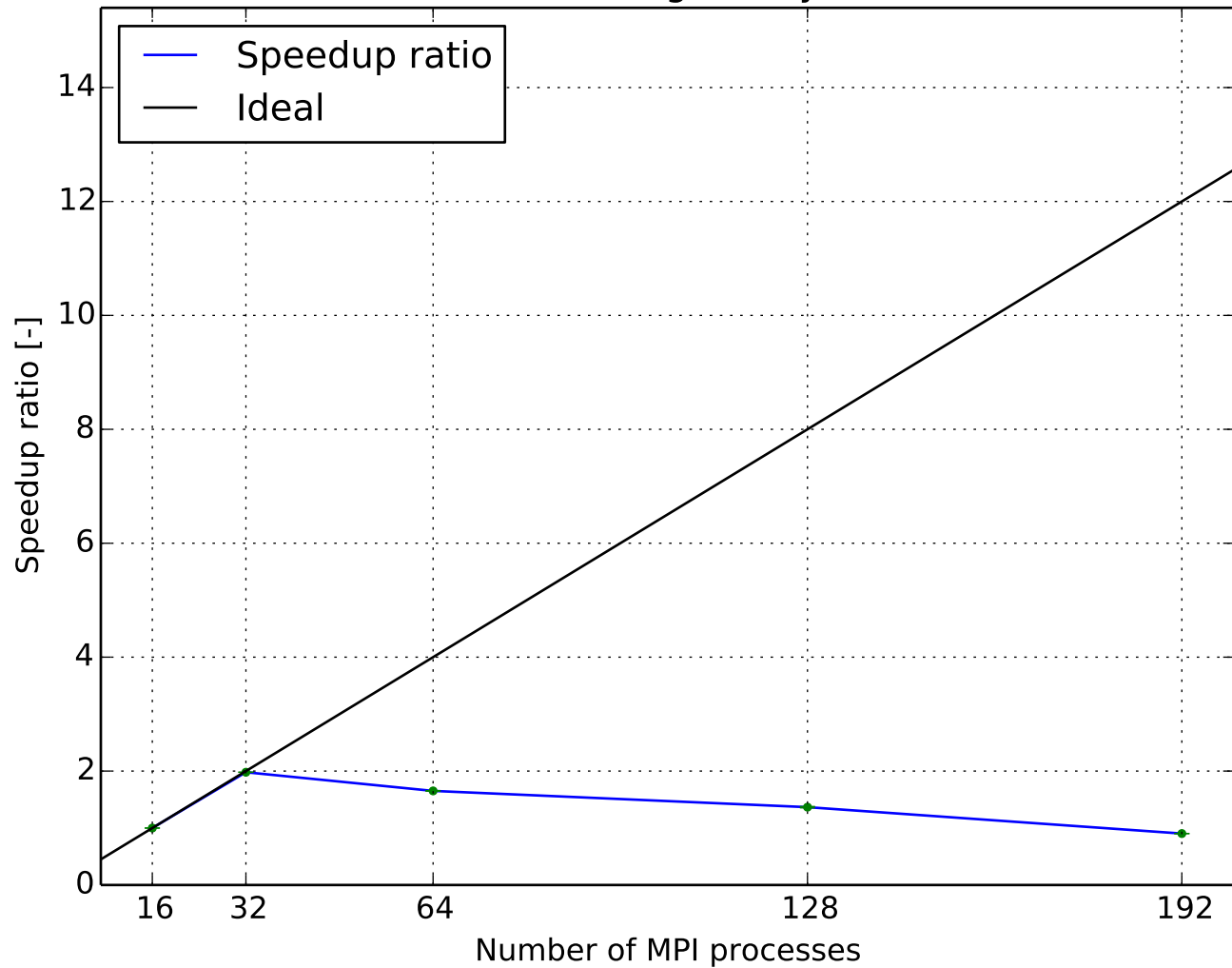
Parallel efficiency
(0.74292M cells, Smagorinsky ,GAMG-DICGaussSeidel)



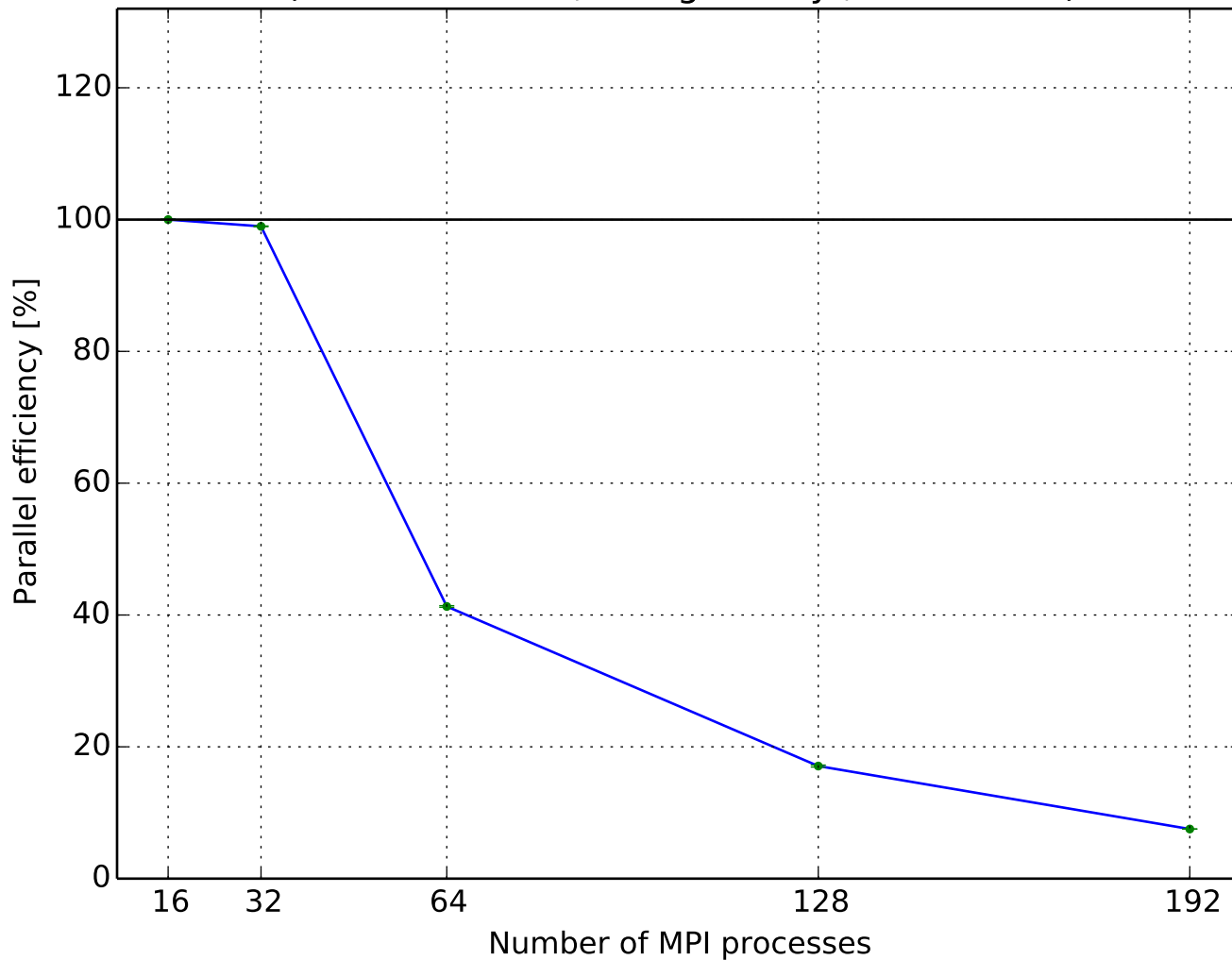
Execution time per time step
(0.74292M cells, Smagorinsky ,GAMG-FDIC)



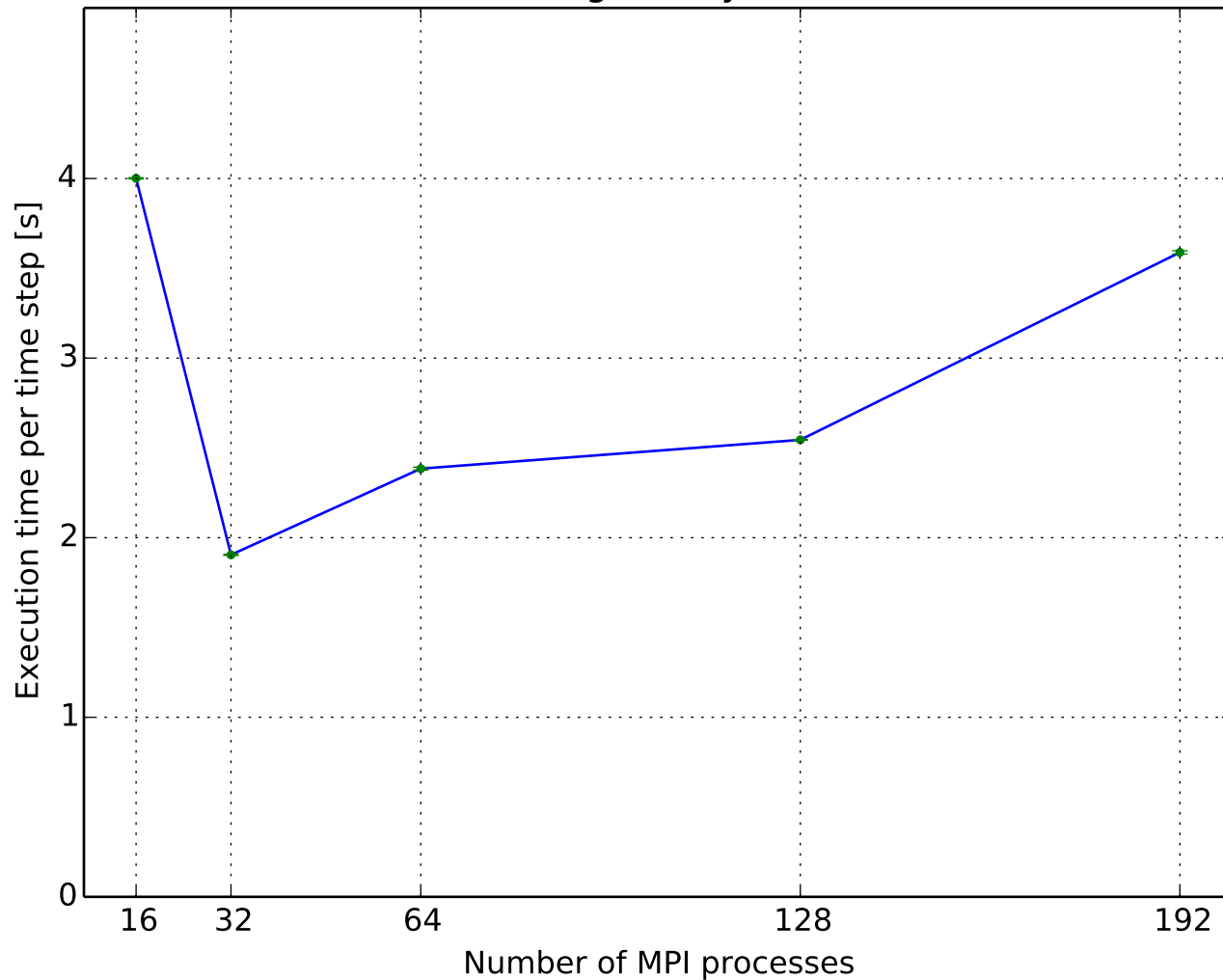
Speedup ratio
(0.74292M cells, Smagorinsky ,GAMG-FDIC)



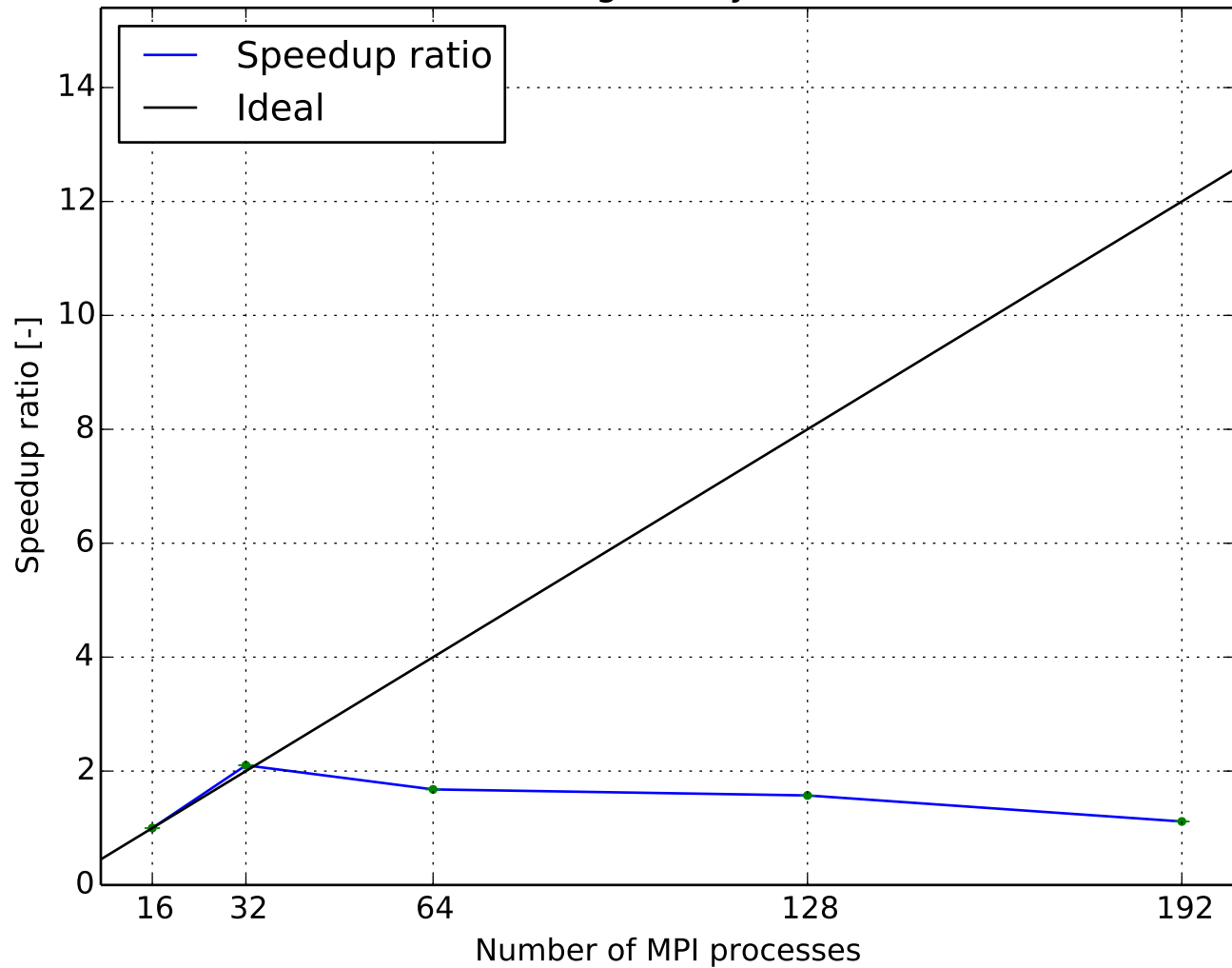
Parallel efficiency
(0.74292M cells, Smagorinsky ,GAMG-FDIC)



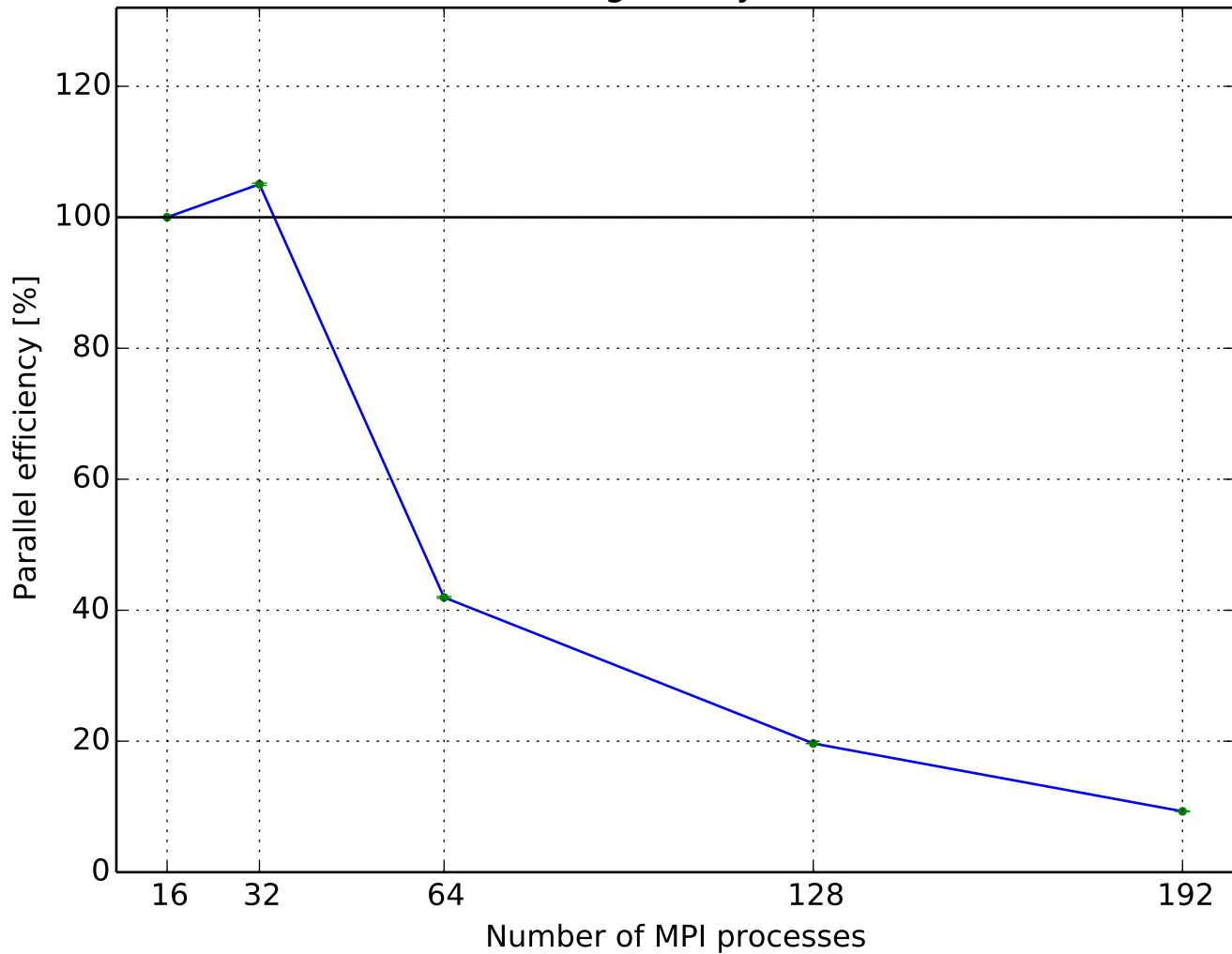
Execution time per time step
(0.74292M cells, Smagorinsky ,GAMG-GaussSeidel)



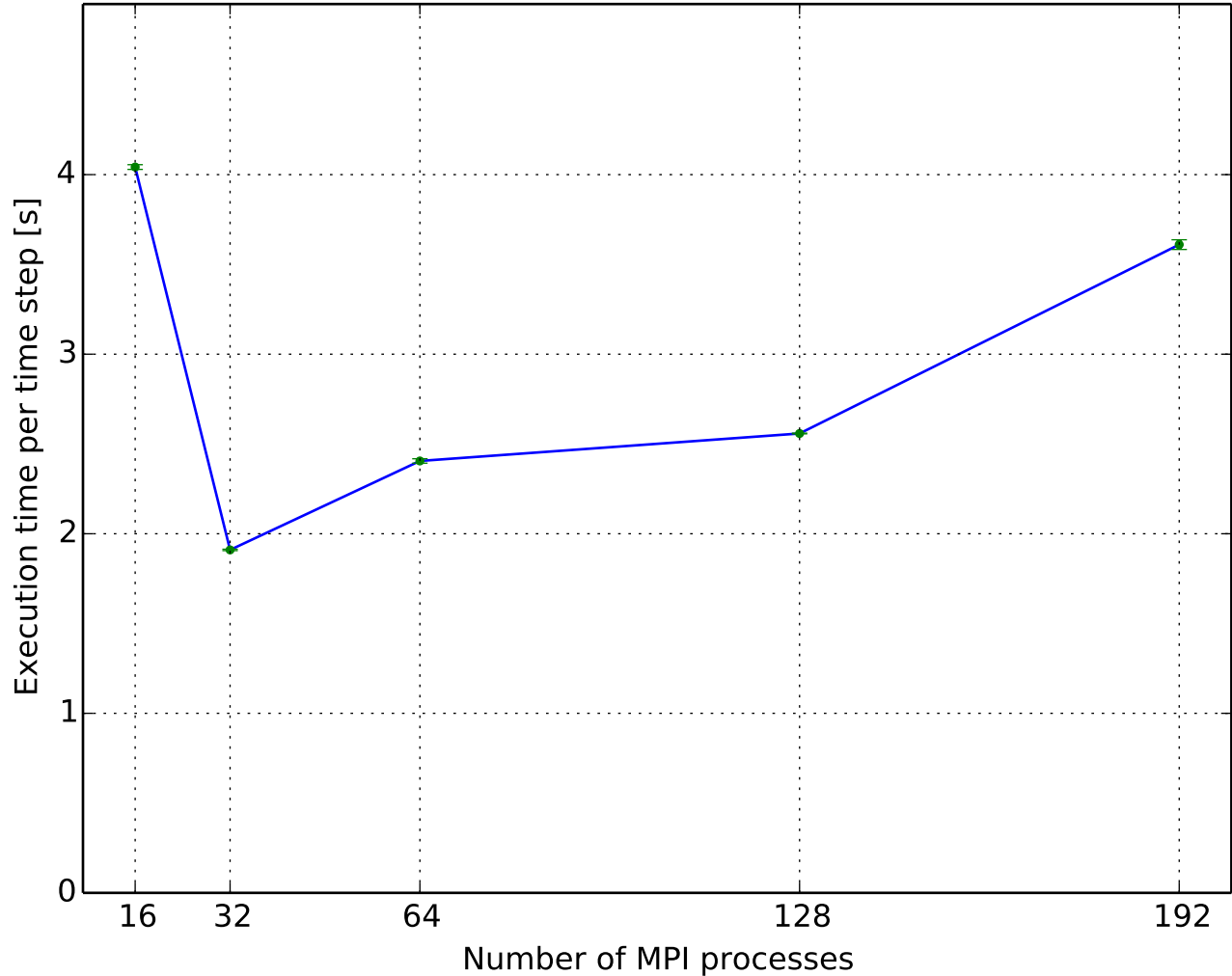
Speedup ratio
(0.74292M cells, Smagorinsky ,GAMG-GaussSeidel)



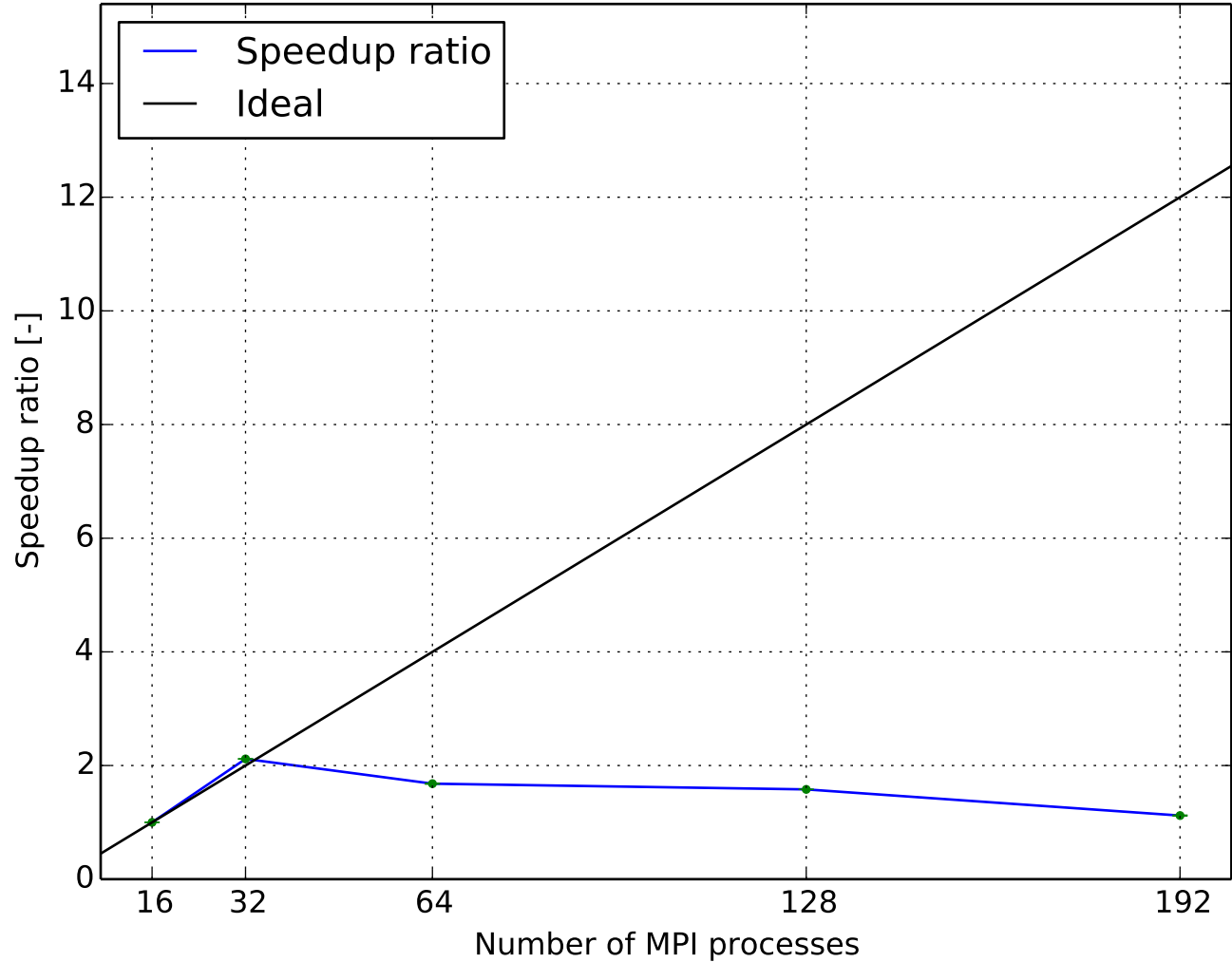
Parallel efficiency
(0.74292M cells, Smagorinsky ,GAMG-GaussSeidel)



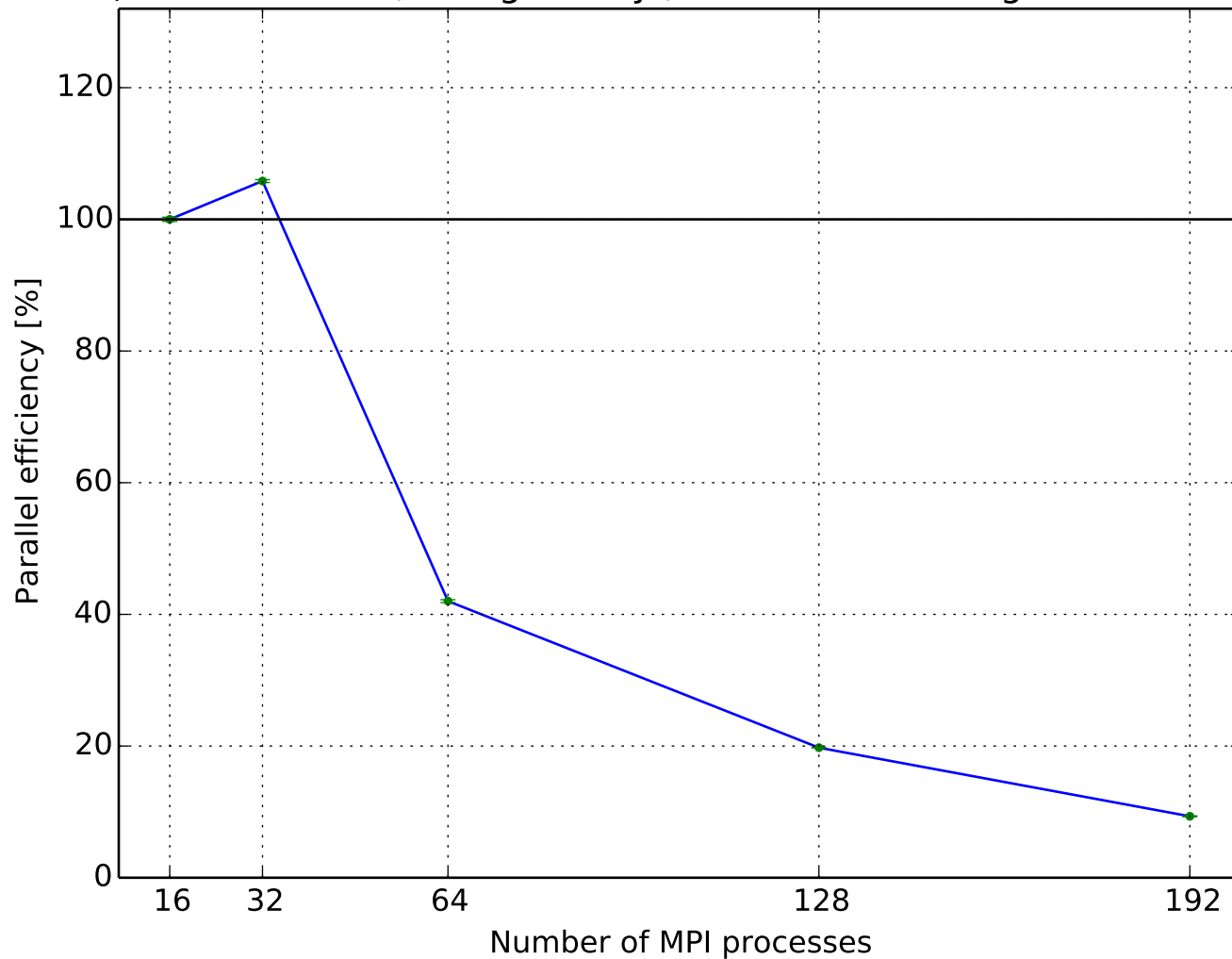
Execution time per time step
(0.74292M cells, Smagorinsky ,GAMG-nonBlockingGaussSeidel)



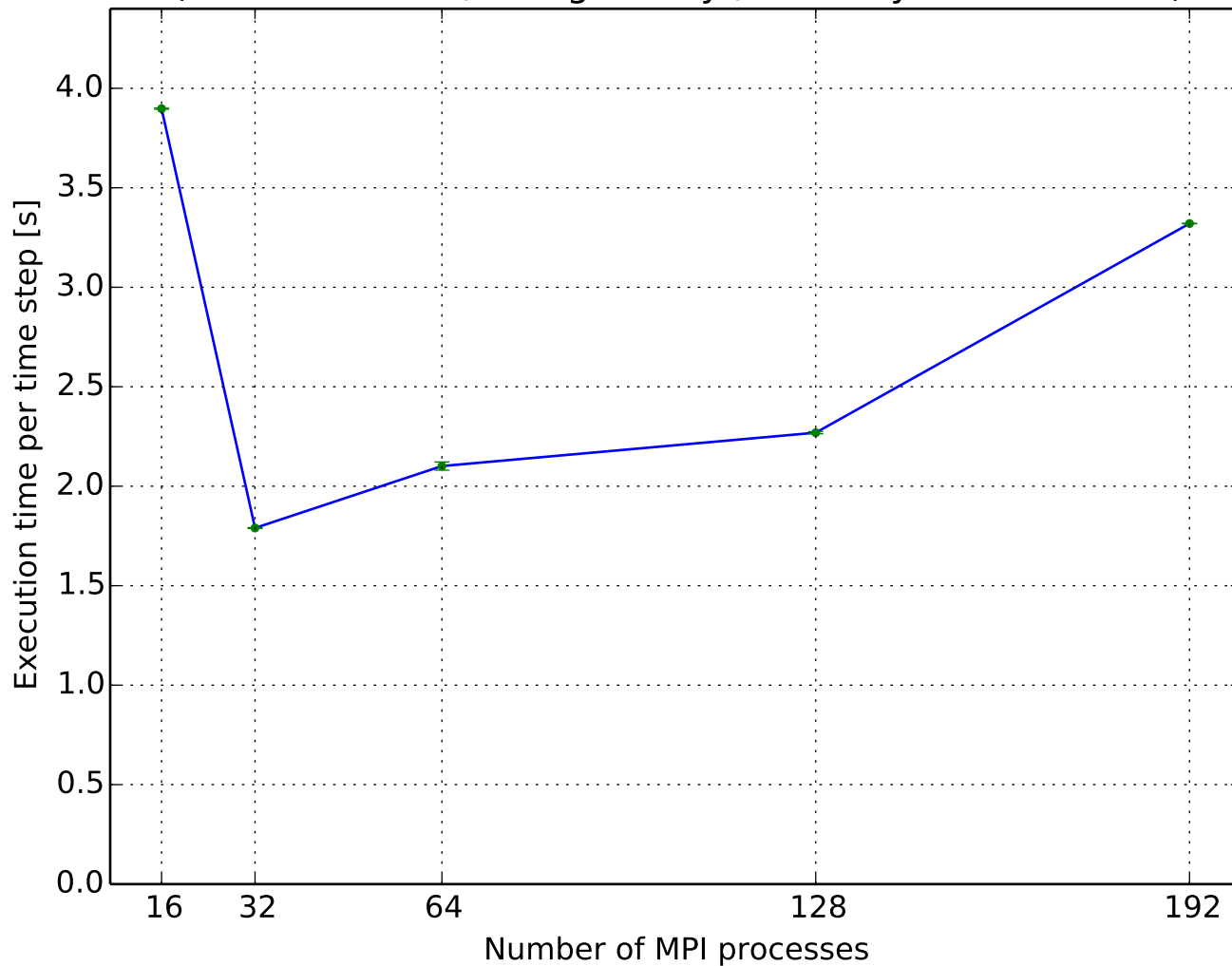
Speedup ratio
(0.74292M cells, Smagorinsky ,GAMG-nonBlockingGaussSeidel)



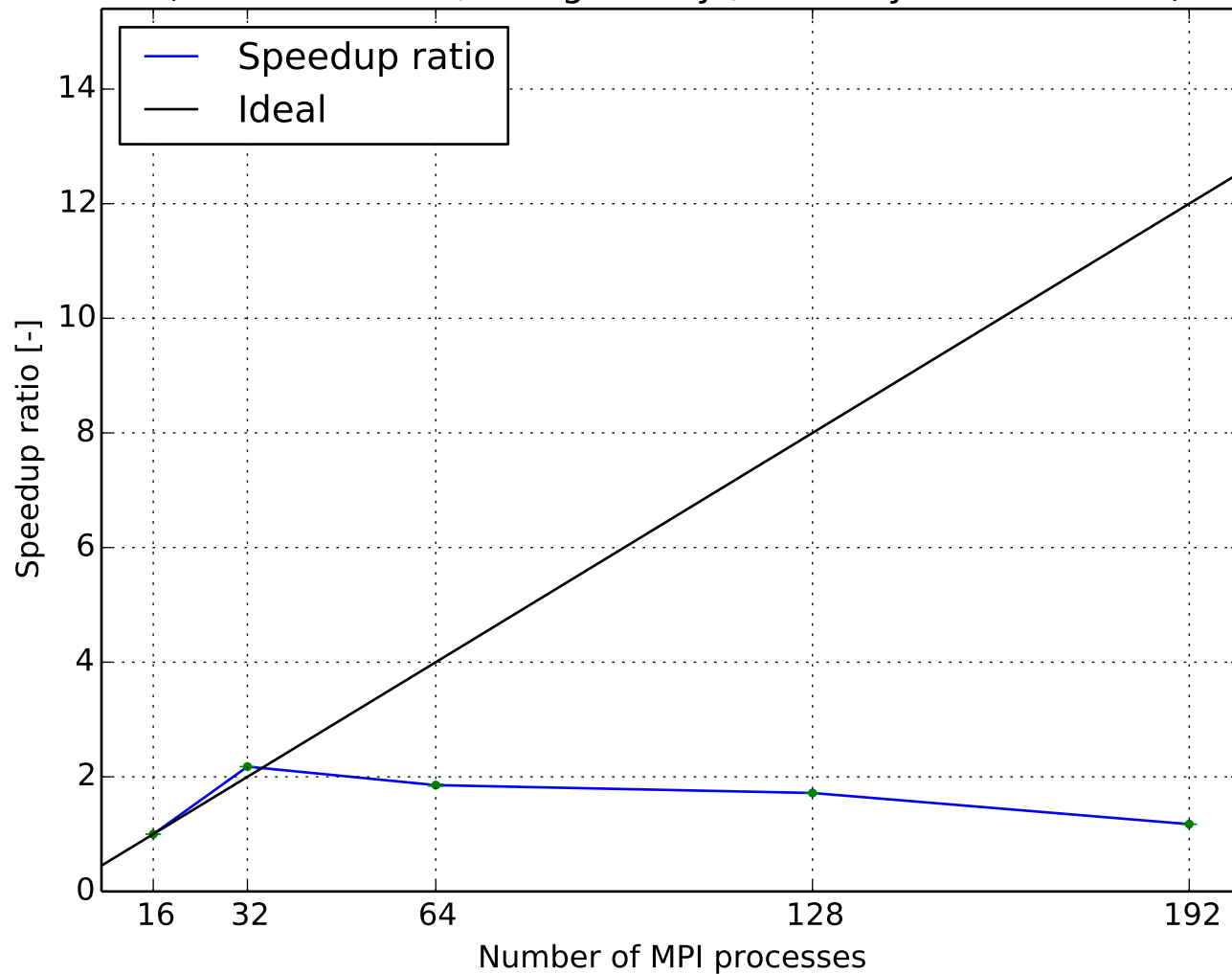
Parallel efficiency
(0.74292M cells, Smagorinsky ,GAMG-nonBlockingGaussSeidel)



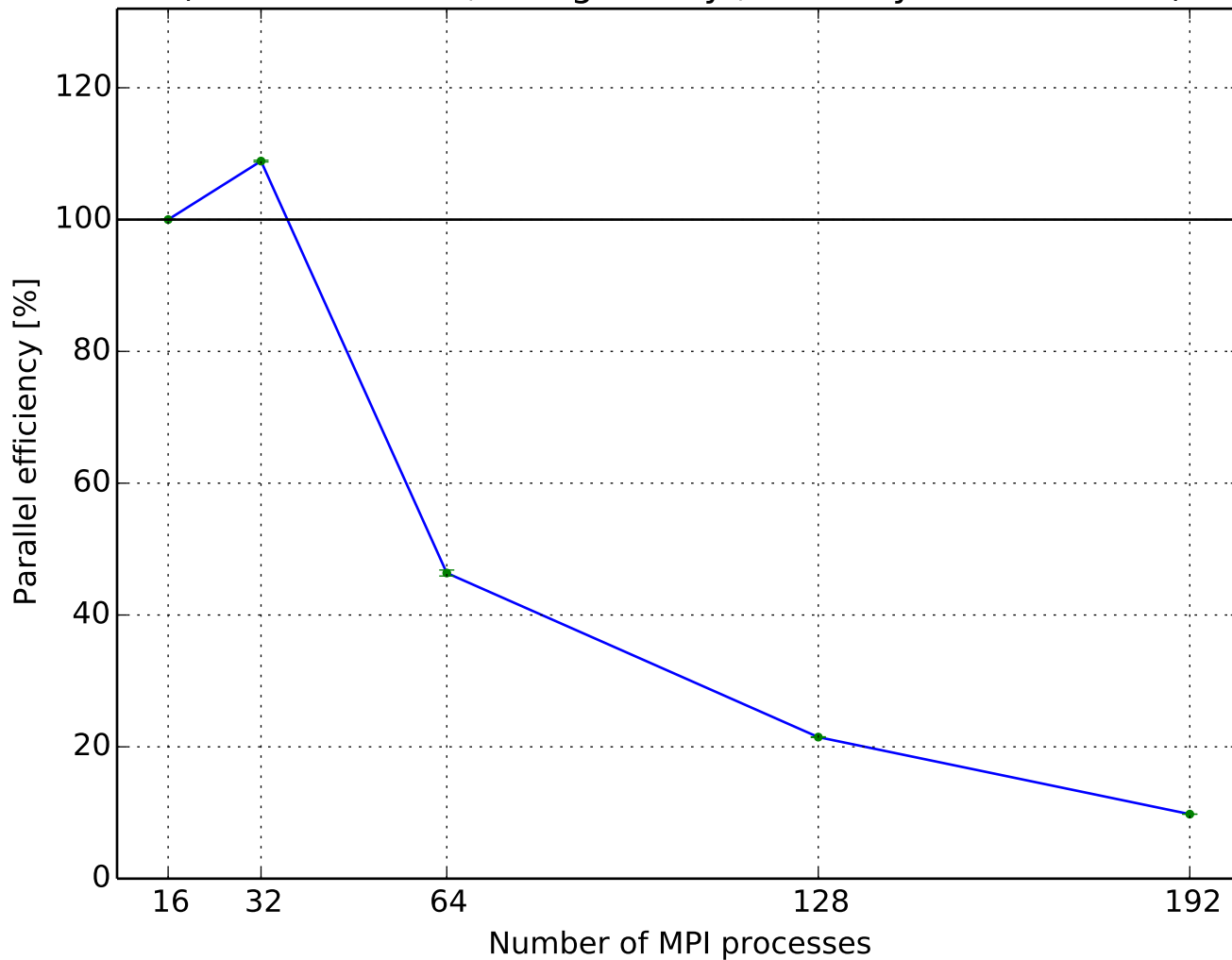
Execution time per time step
(0.74292M cells, Smagorinsky ,GAMG-symGaussSeidel)



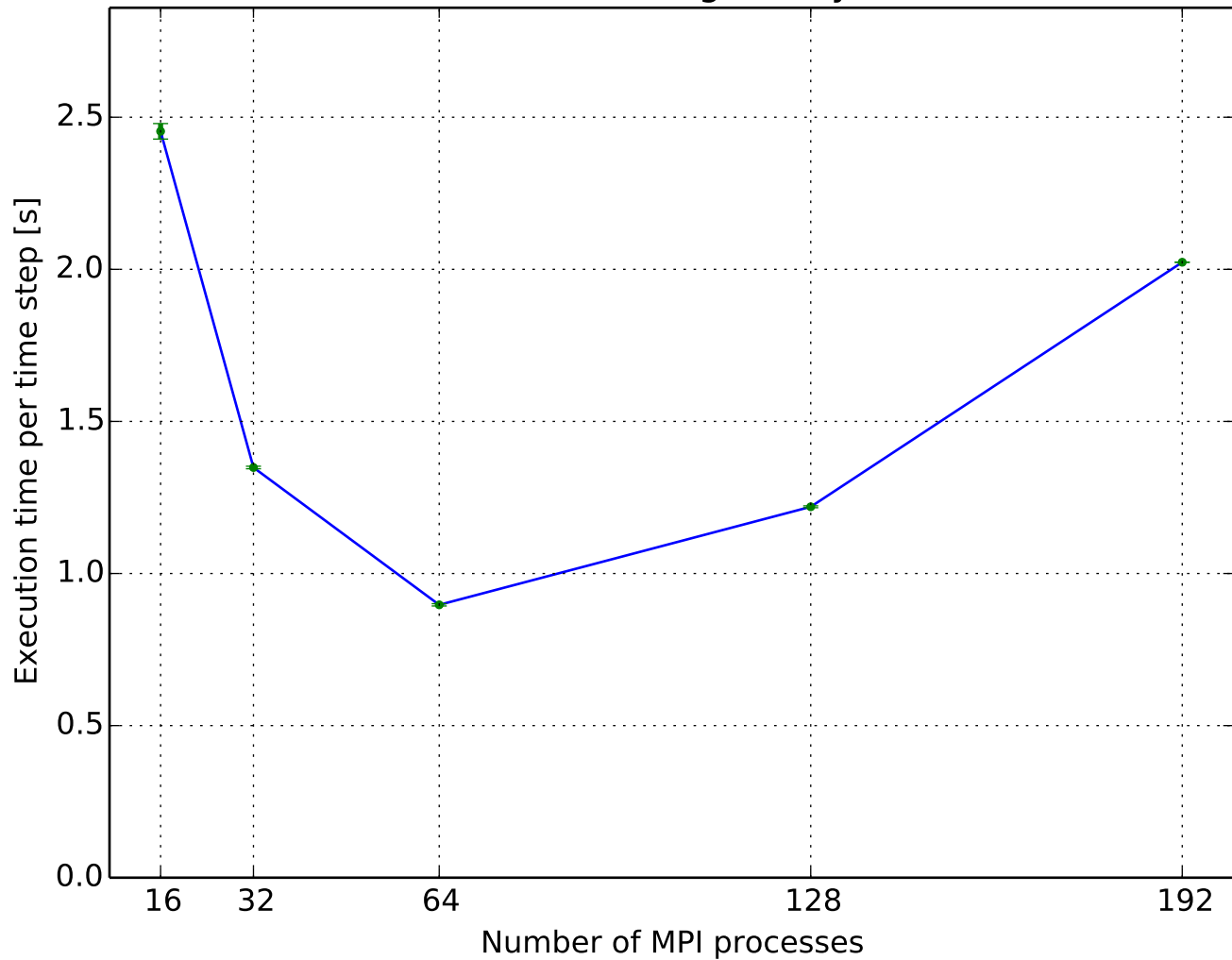
Speedup ratio
(0.74292M cells, Smagorinsky ,GAMG-symGaussSeidel)



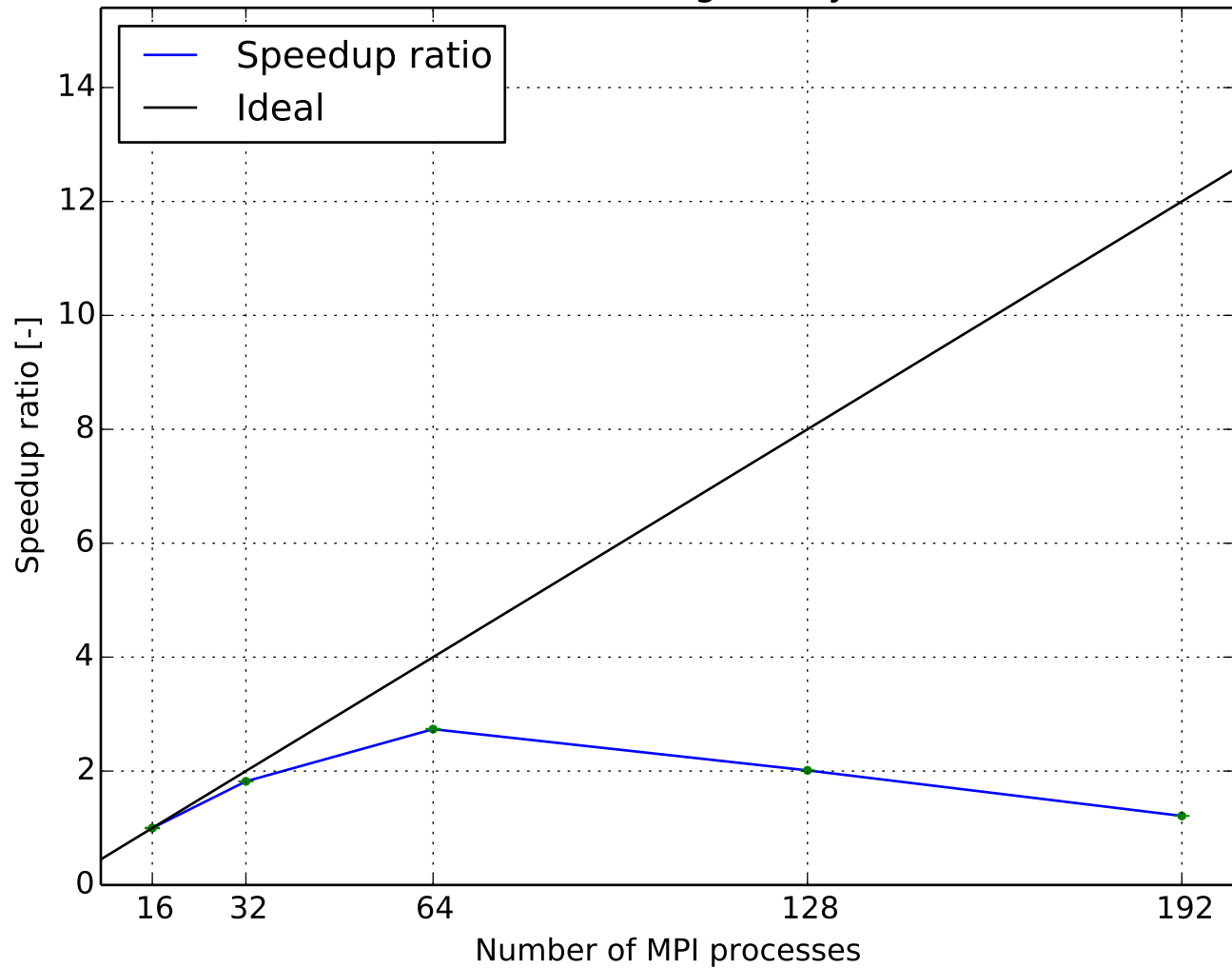
Parallel efficiency
(0.74292M cells, Smagorinsky ,GAMG-symGaussSeidel)



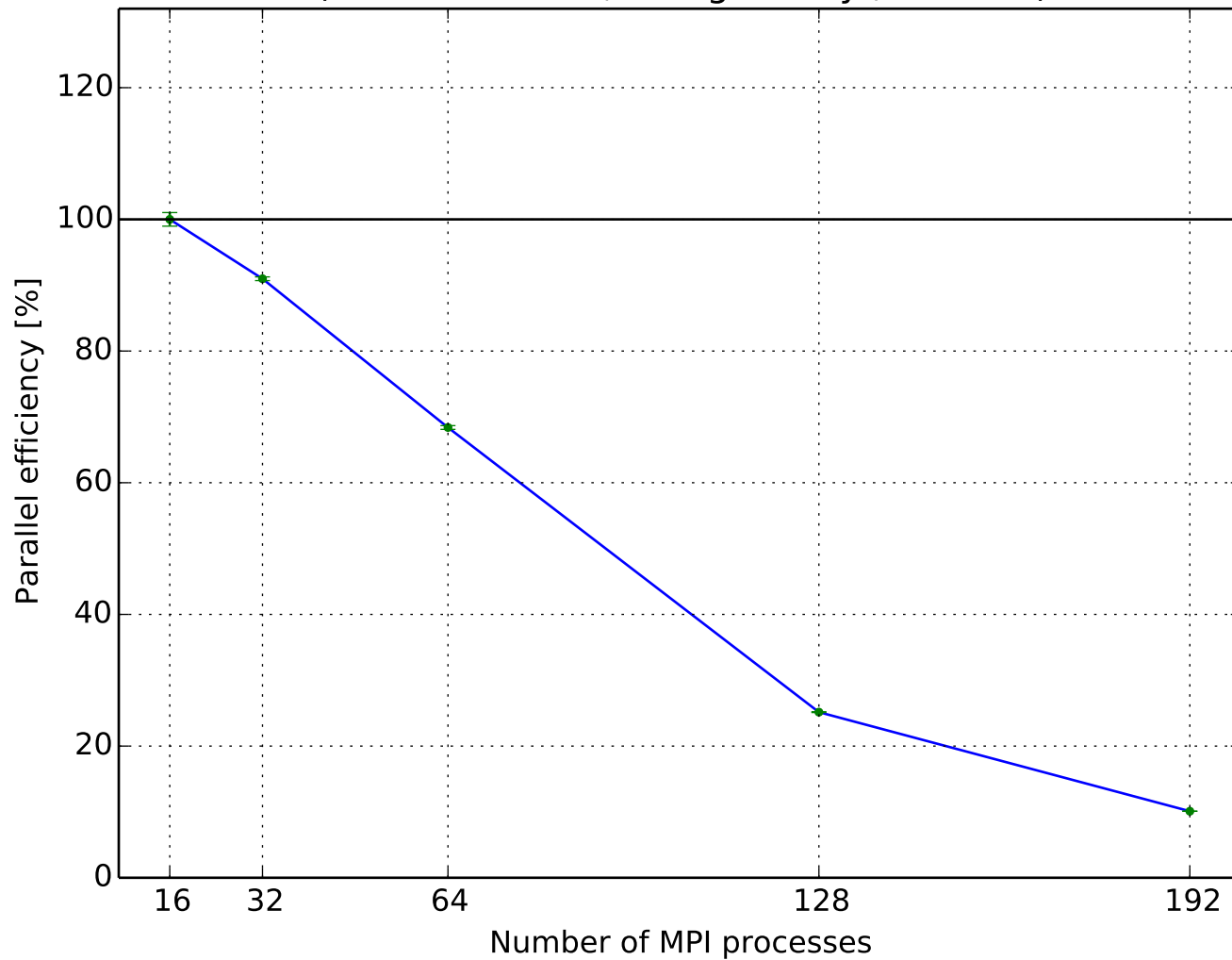
Execution time per time step
(0.74292M cells, Smagorinsky ,PCG-DIC)



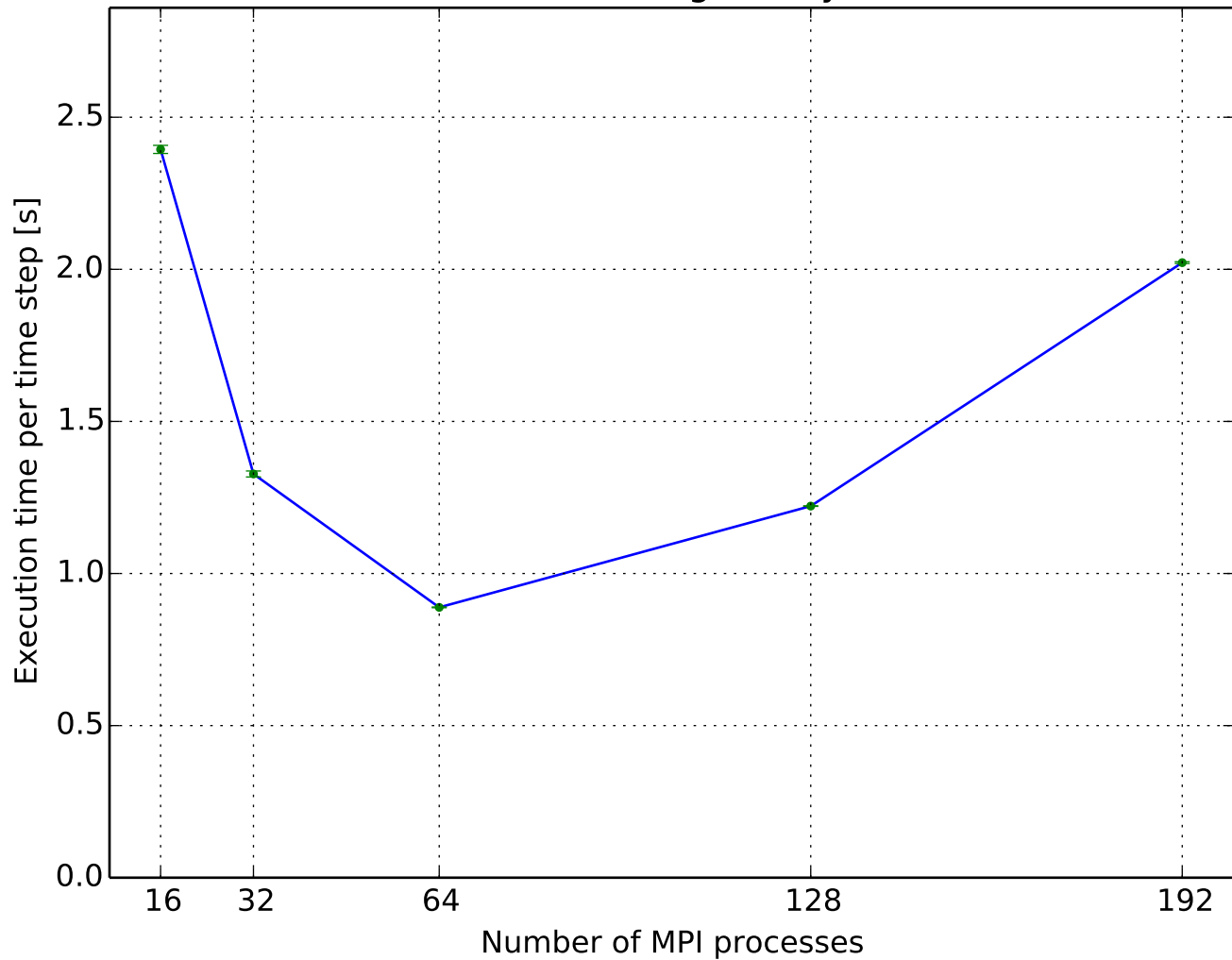
Speedup ratio
(0.74292M cells, Smagorinsky ,PCG-DIC)



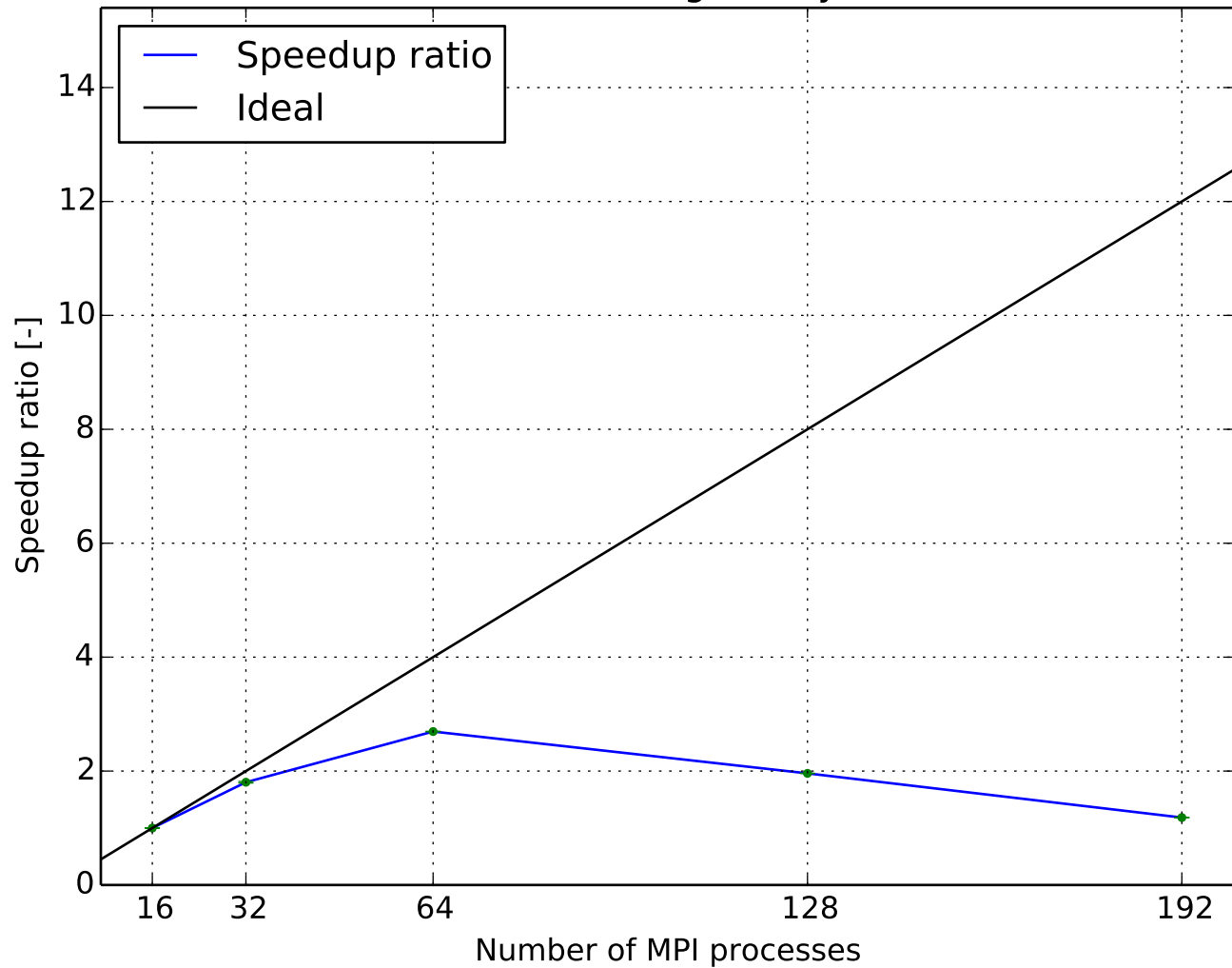
Parallel efficiency
(0.74292M cells, Smagorinsky ,PCG-DIC)



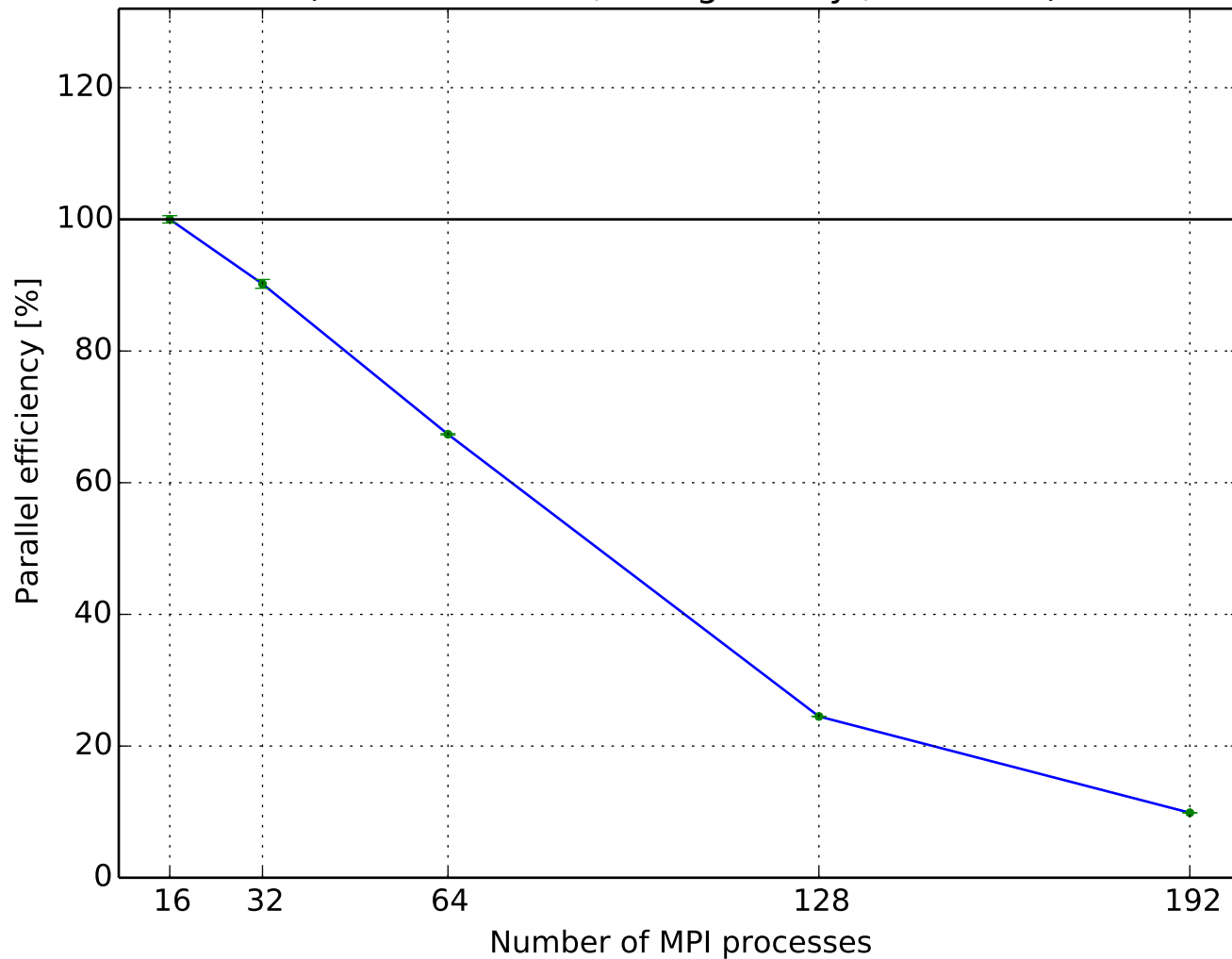
Execution time per time step
(0.74292M cells, Smagorinsky ,PCG-FDIC)



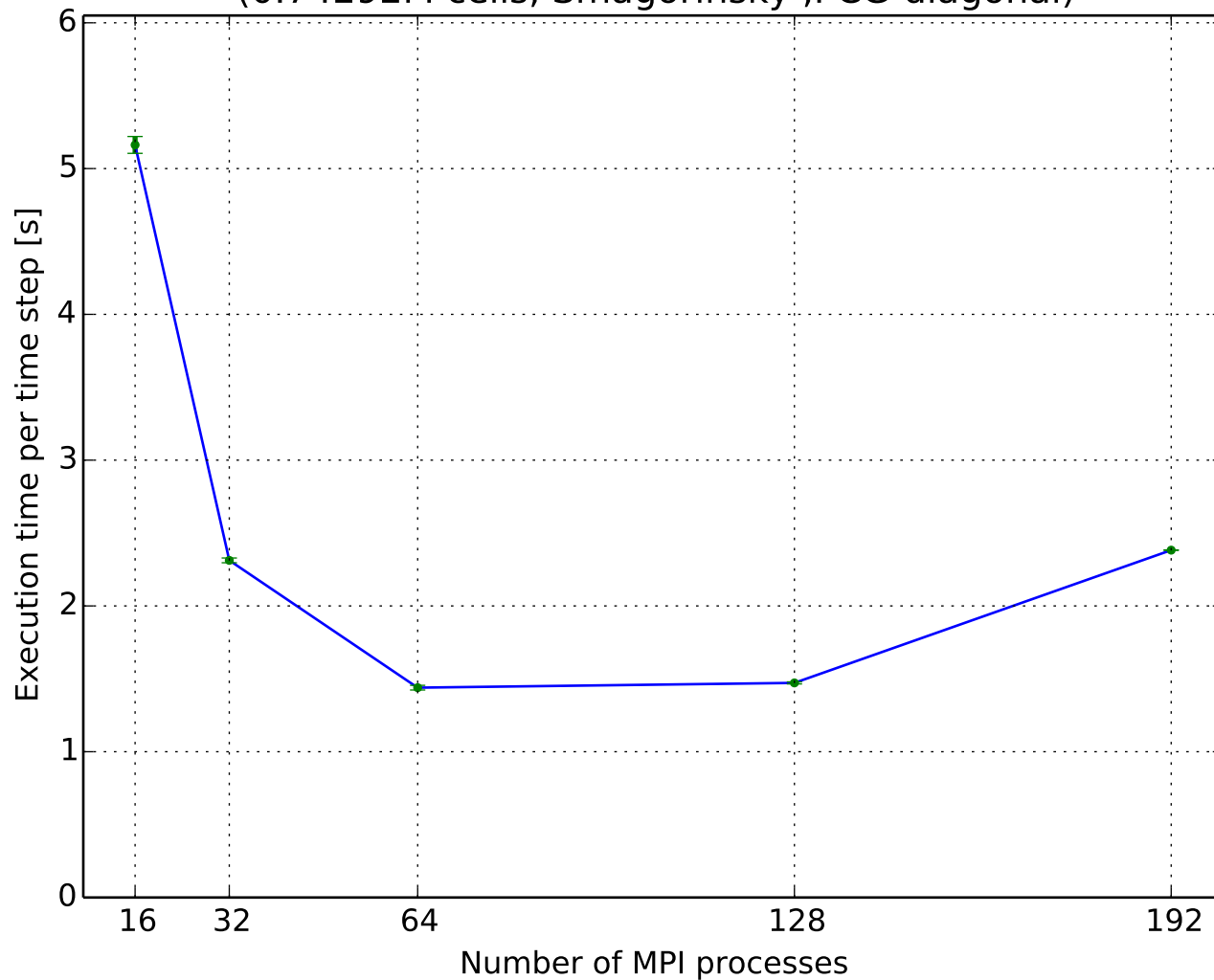
Speedup ratio
(0.74292M cells, Smagorinsky ,PCG-FDIC)



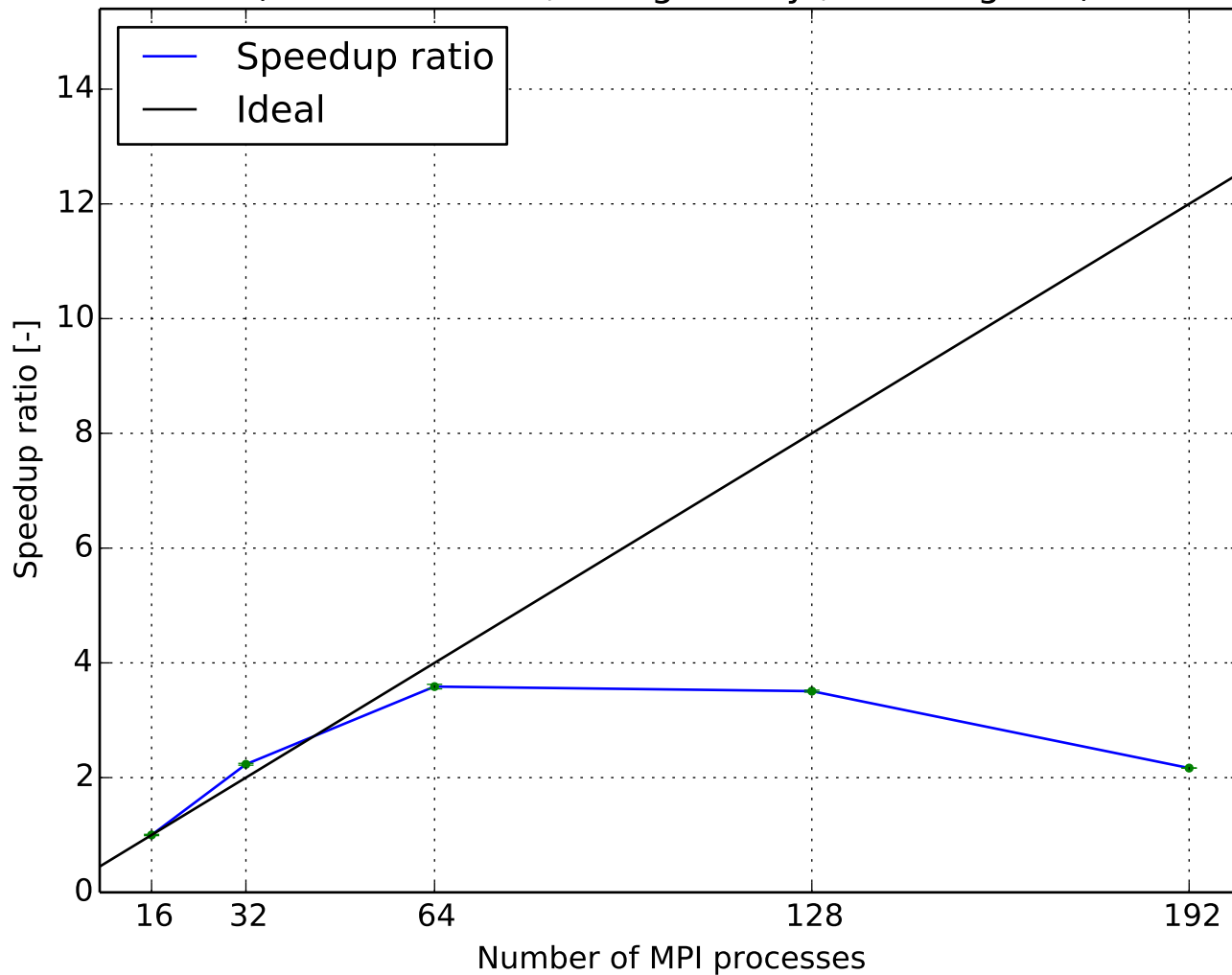
Parallel efficiency
(0.74292M cells, Smagorinsky ,PCG-FDIC)



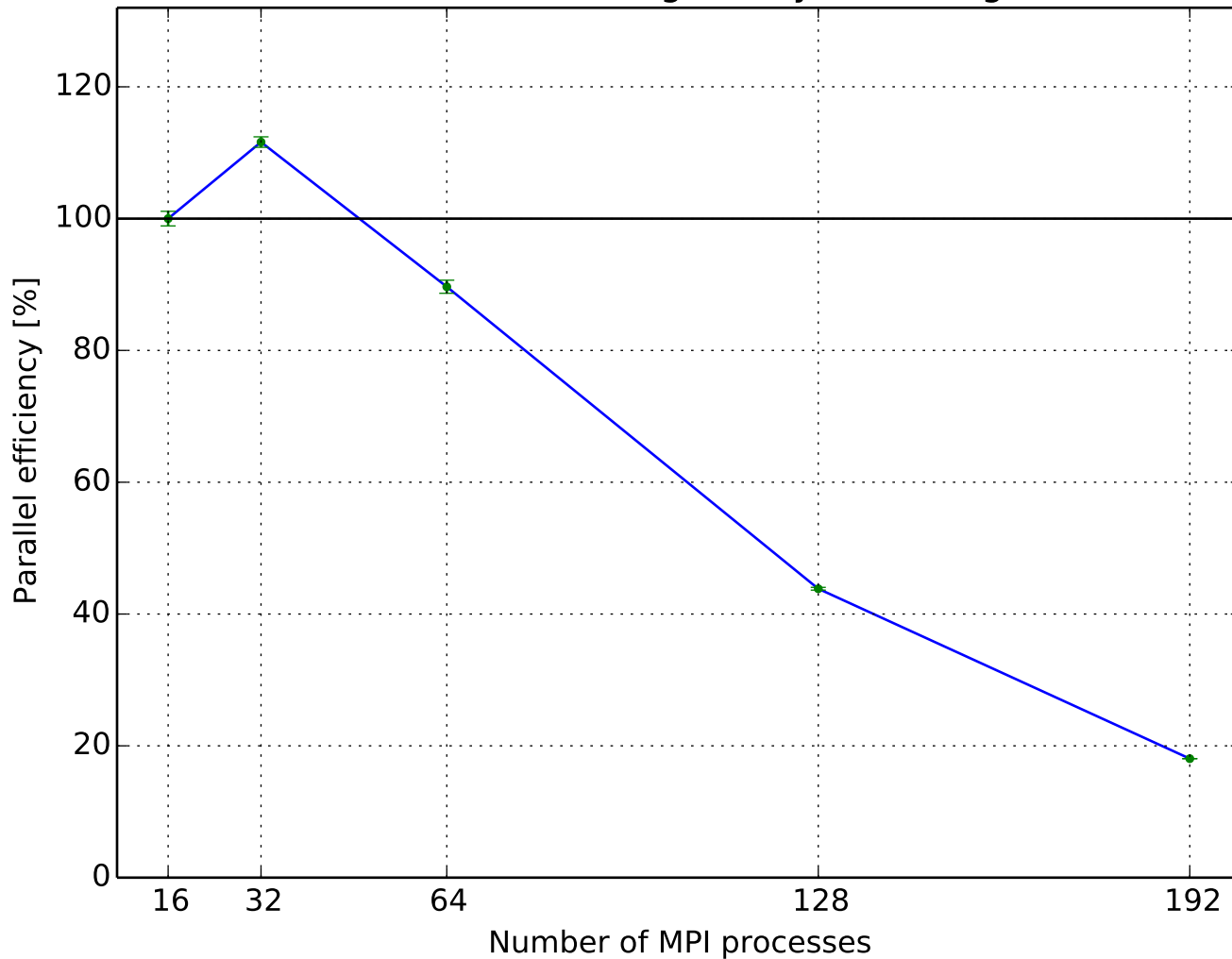
Execution time per time step
(0.74292M cells, Smagorinsky ,PCG-diagonal)



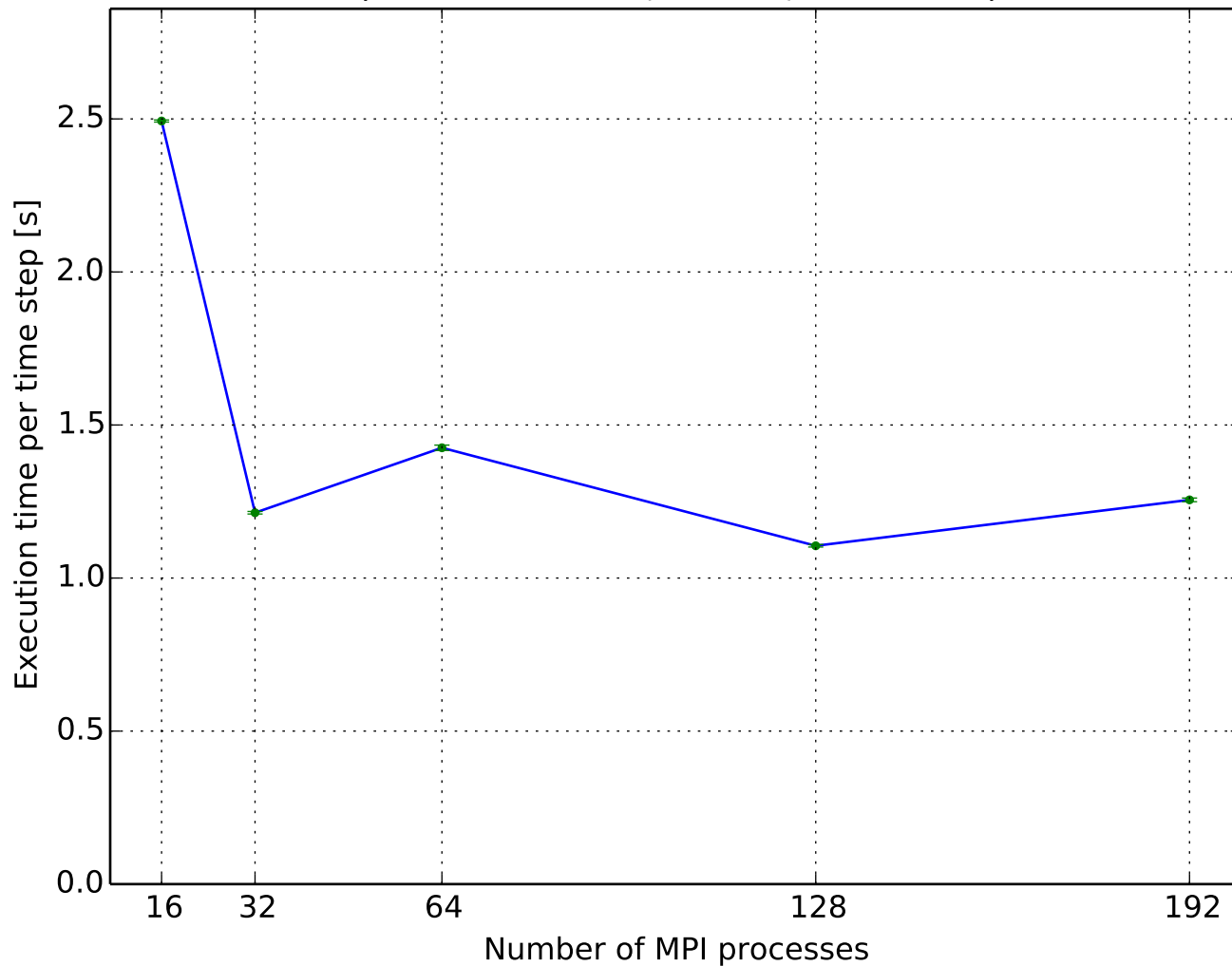
Speedup ratio
(0.74292M cells, Smagorinsky ,PCG-diagonal)



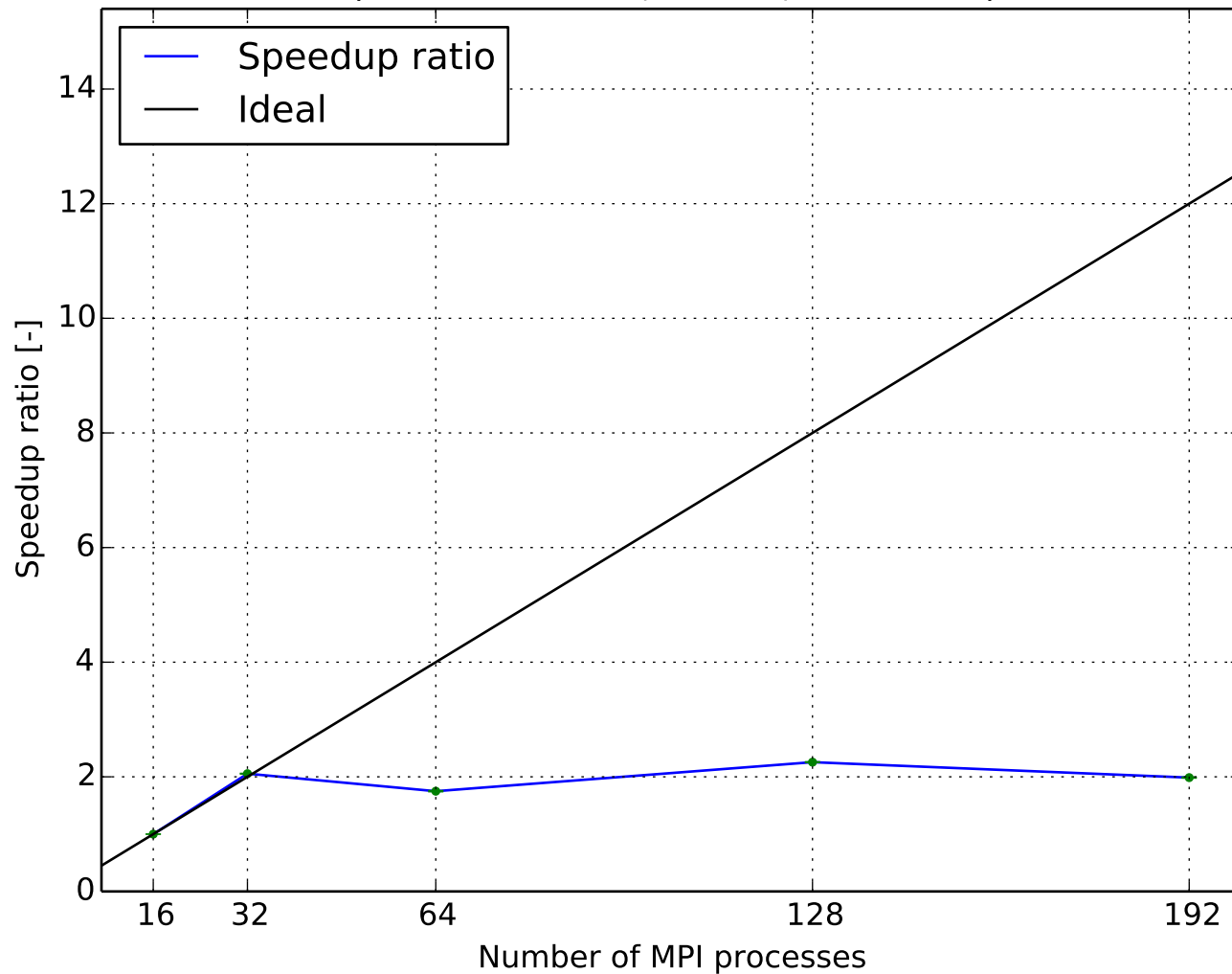
Parallel efficiency
(0.74292M cells, Smagorinsky ,PCG-diagonal)



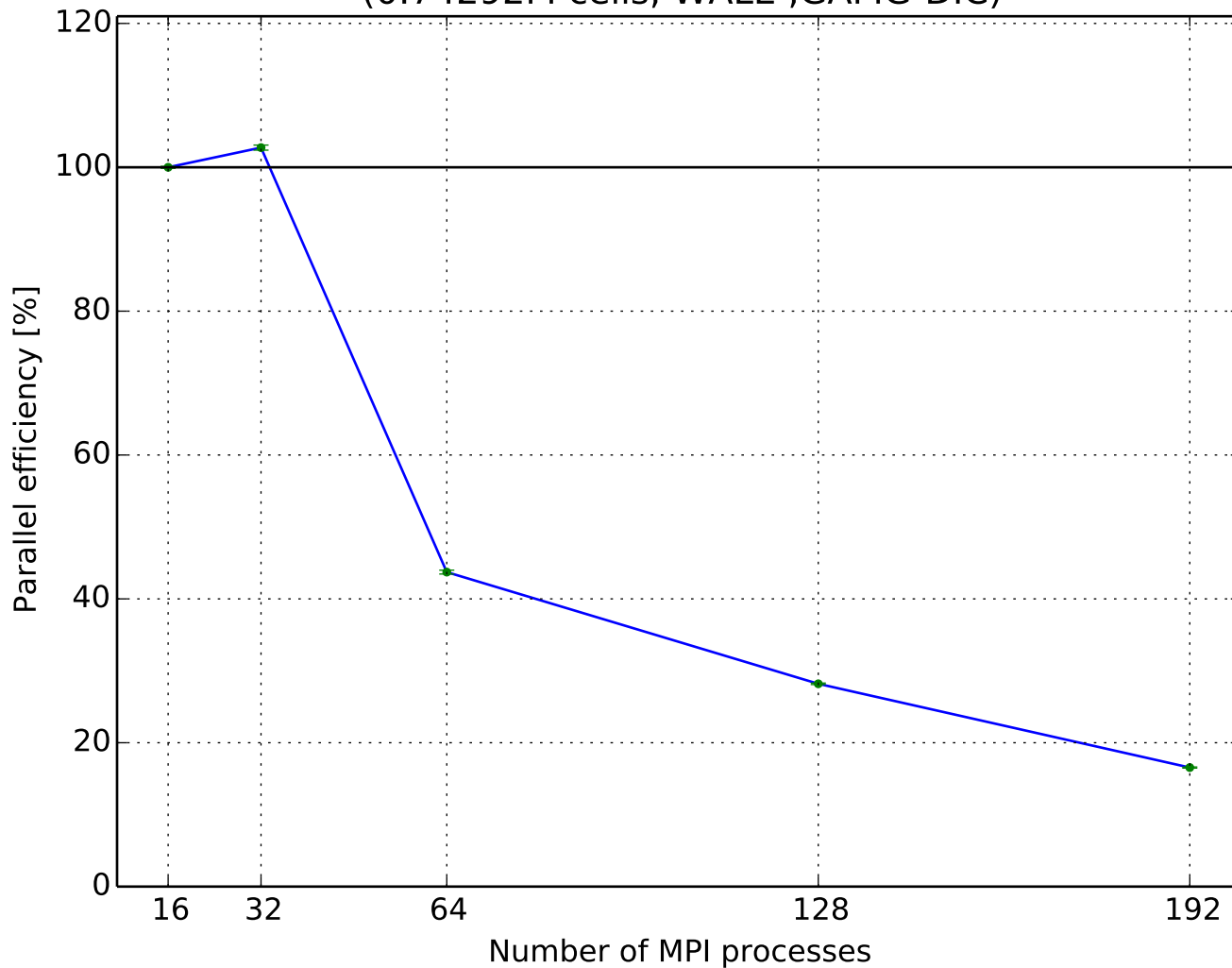
Execution time per time step
(0.74292M cells, WALE ,GAMG-DIC)



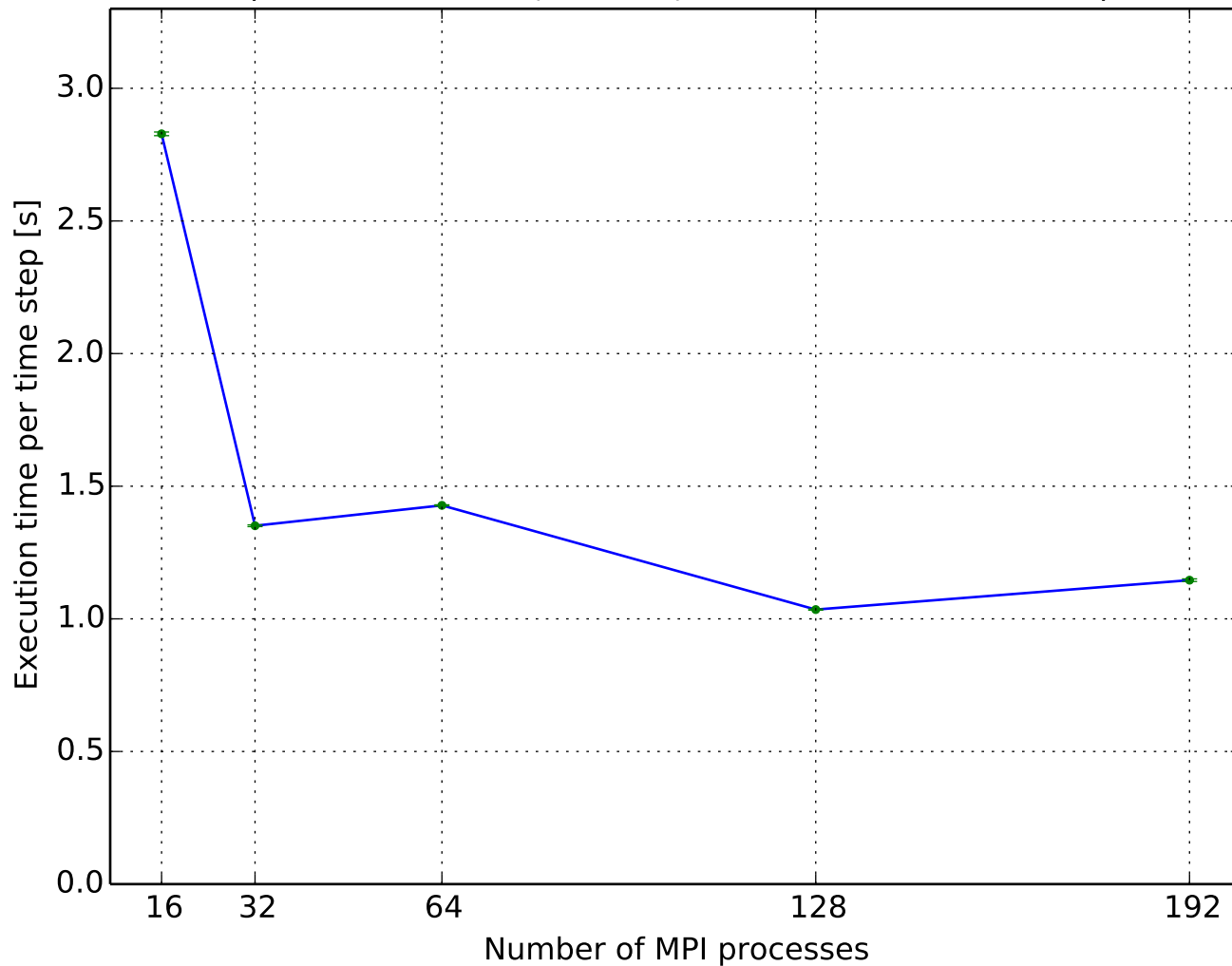
Speedup ratio
(0.74292M cells, WALE ,GAMG-DIC)



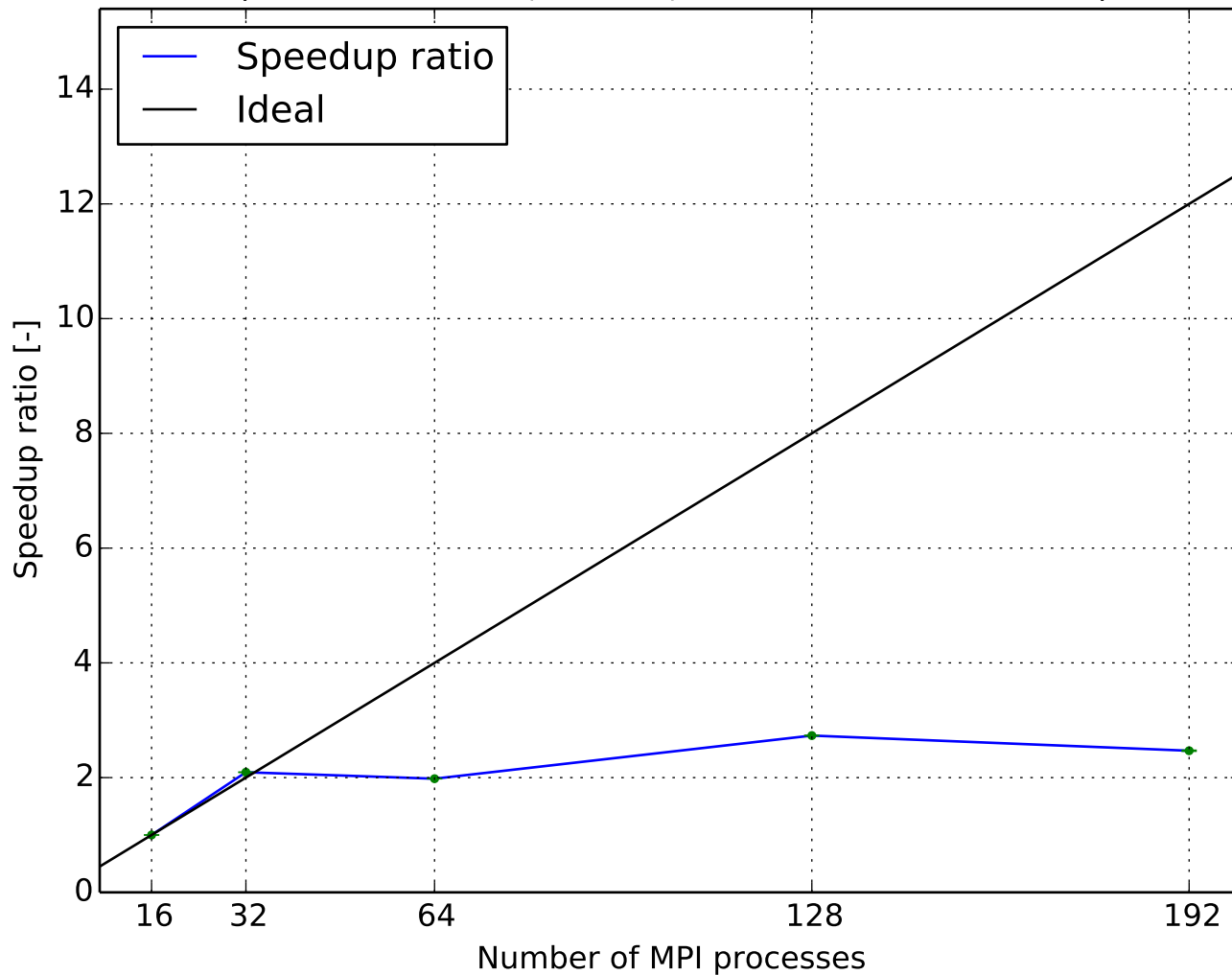
Parallel efficiency
(0.74292M cells, WALE ,GAMG-DIC)



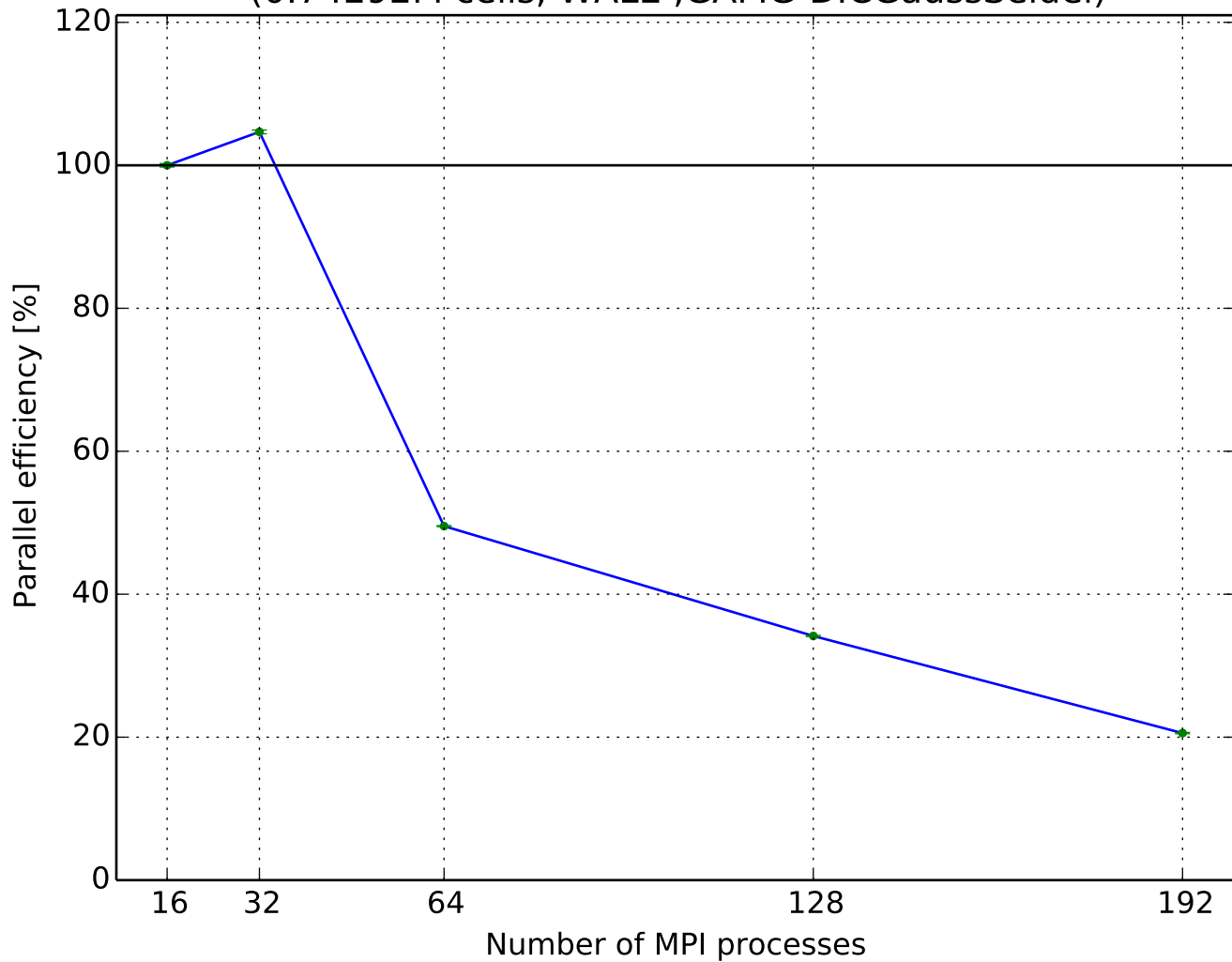
Execution time per time step
(0.74292M cells, WALE ,GAMG-DICGaussSeidel)



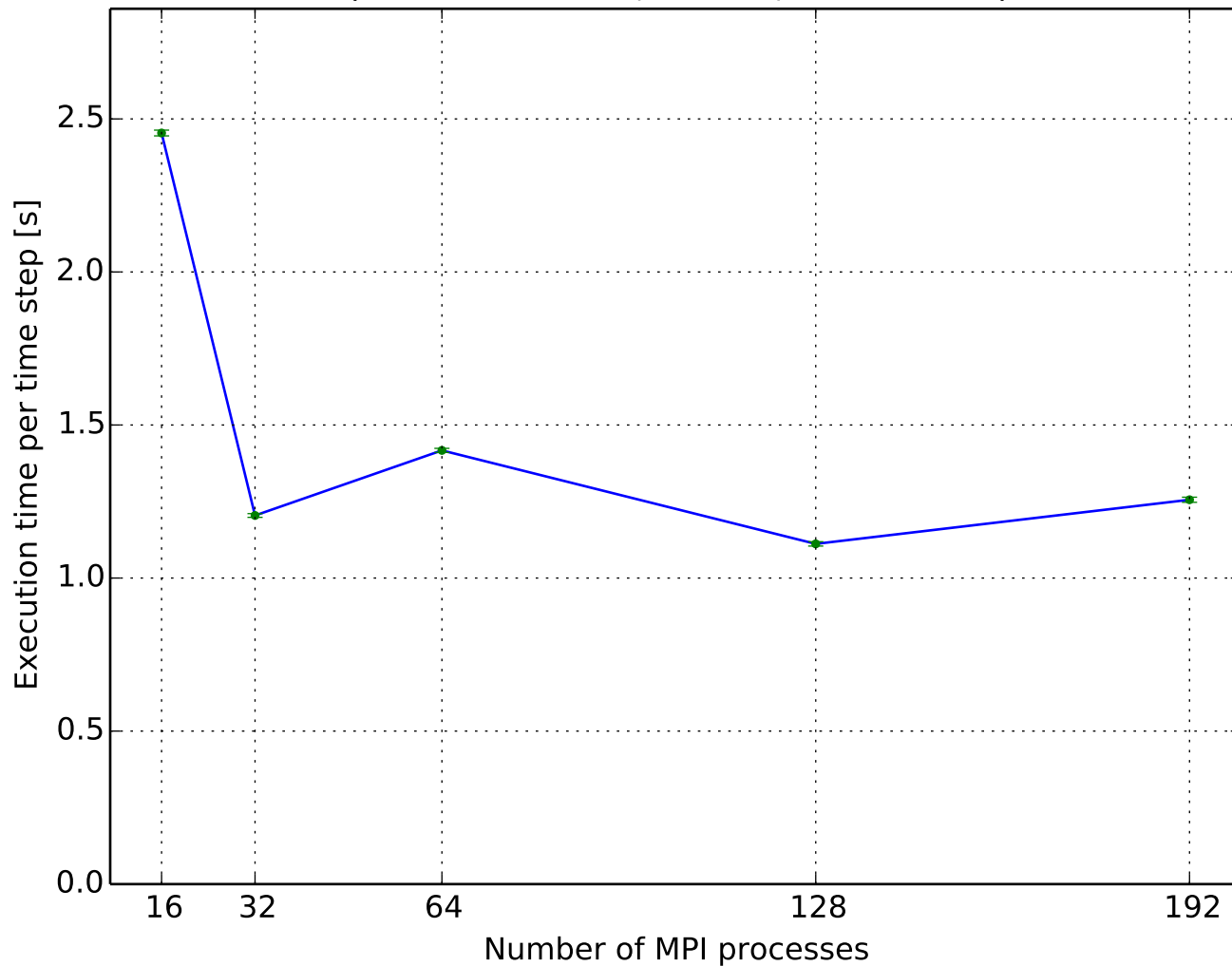
Speedup ratio
(0.74292M cells, WALE ,GAMG-DICGaussSeidel)



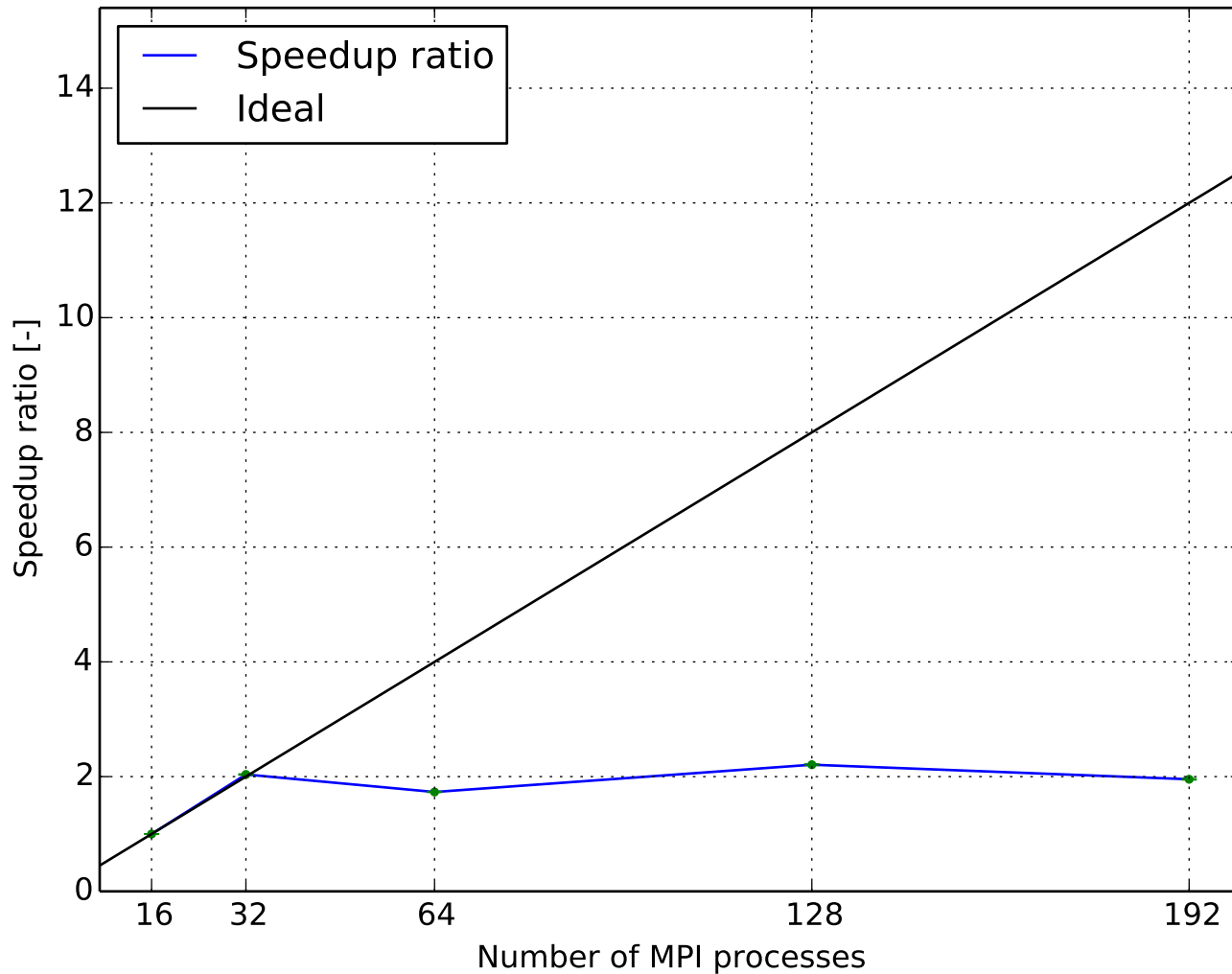
Parallel efficiency
(0.74292M cells, WALE ,GAMG-DICGaussSeidel)



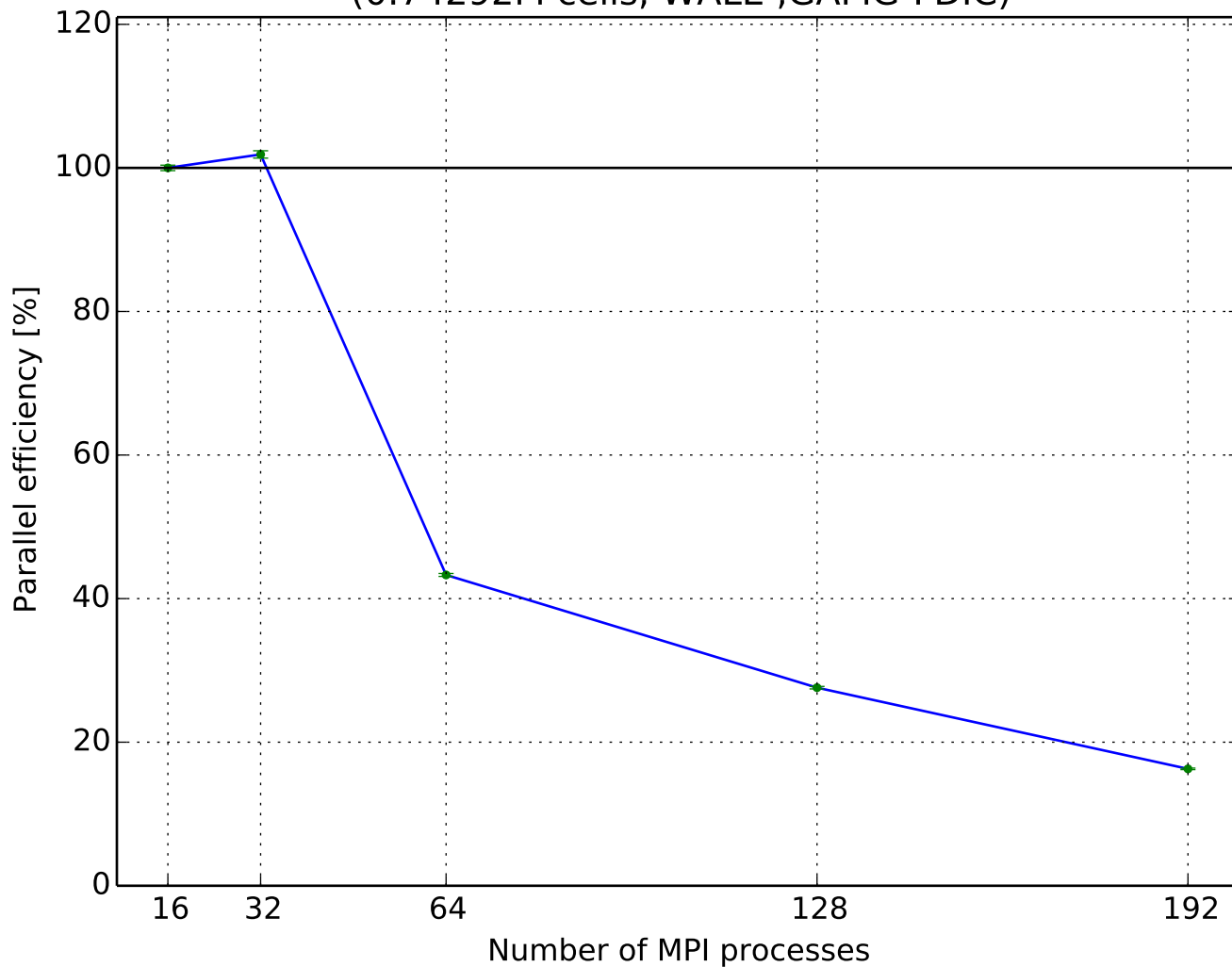
Execution time per time step
(0.74292M cells, WALE ,GAMG-FDIC)



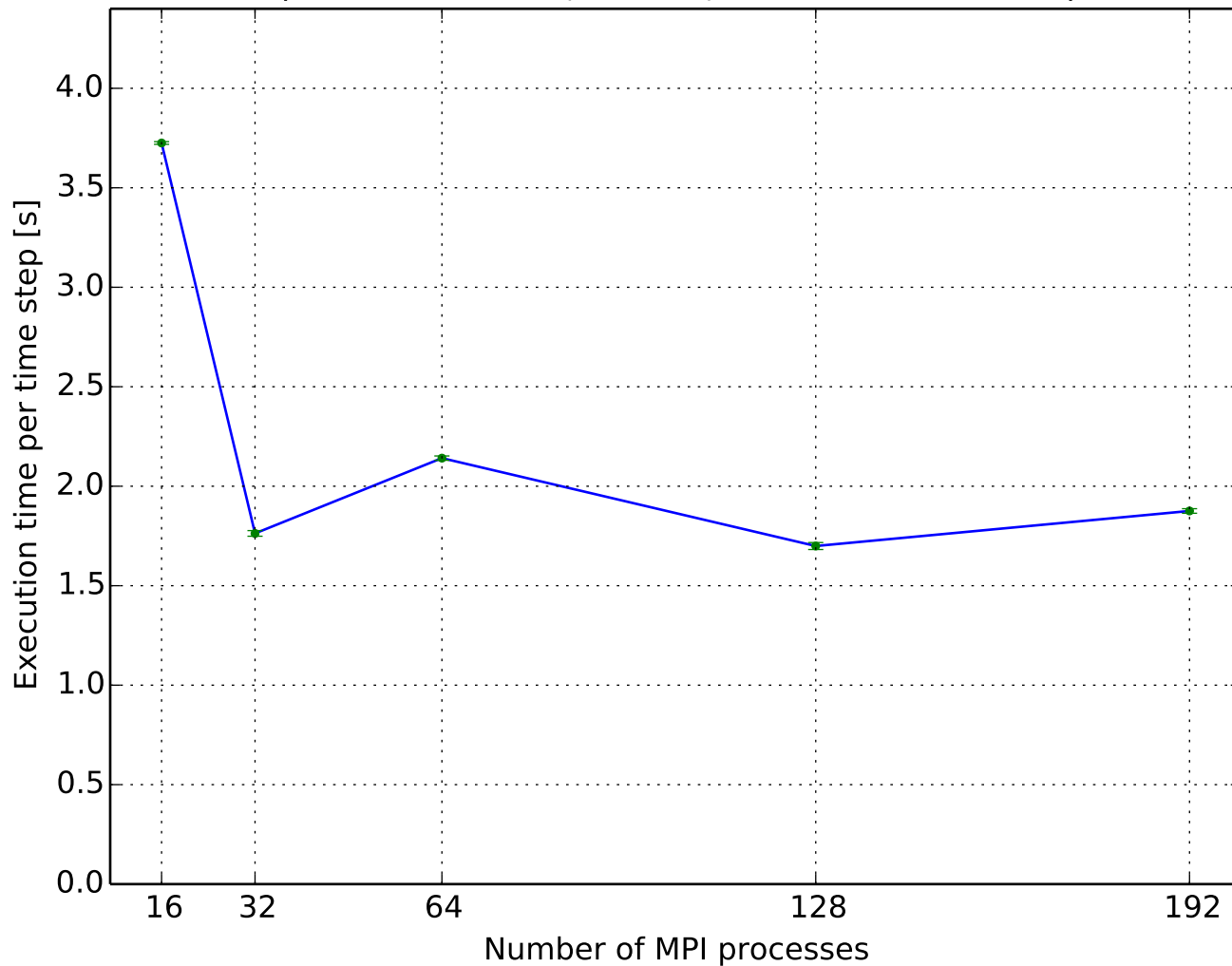
Speedup ratio
(0.74292M cells, WALE ,GAMG-FDIC)



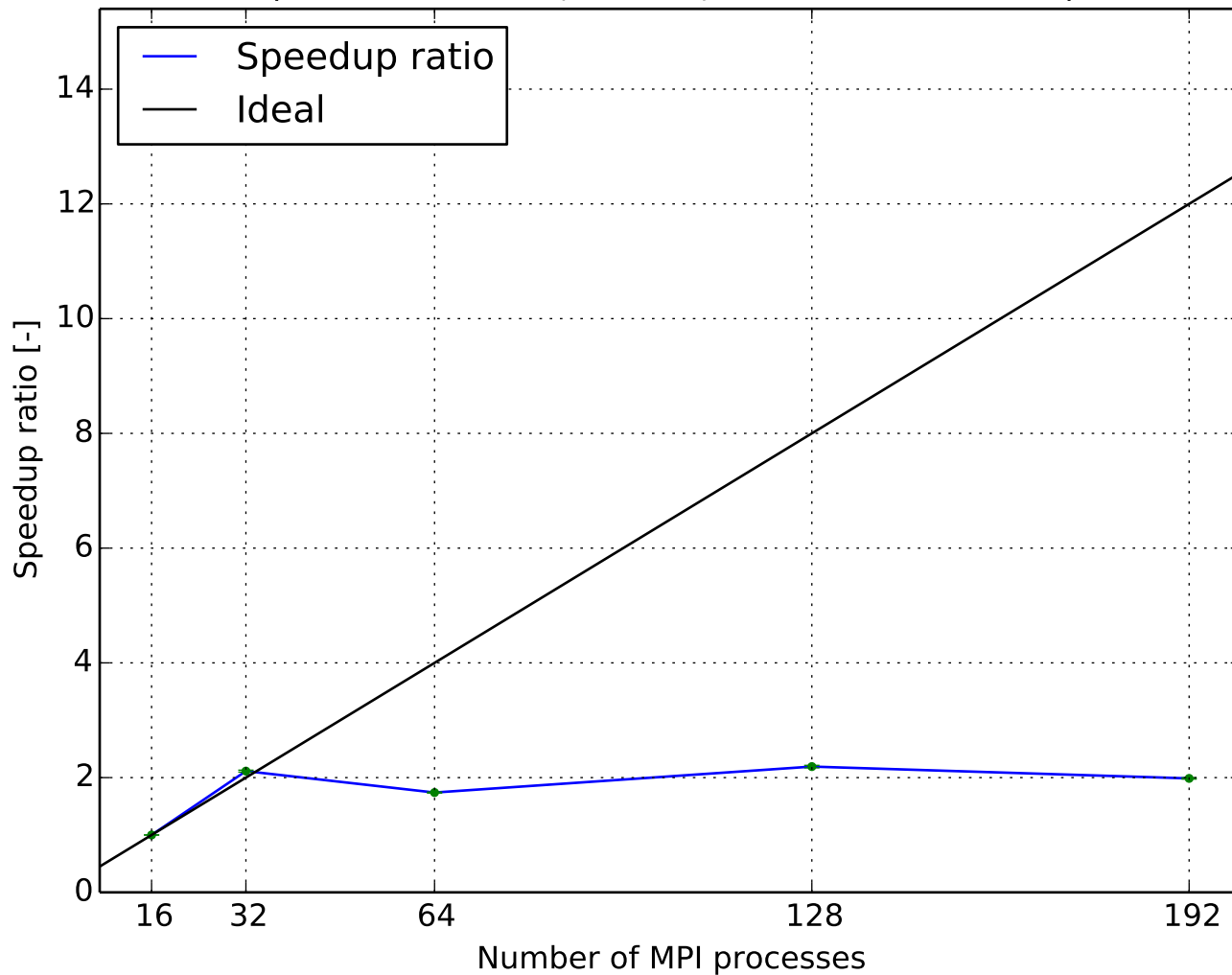
Parallel efficiency
(0.74292M cells, WALE ,GAMG-FDIC)



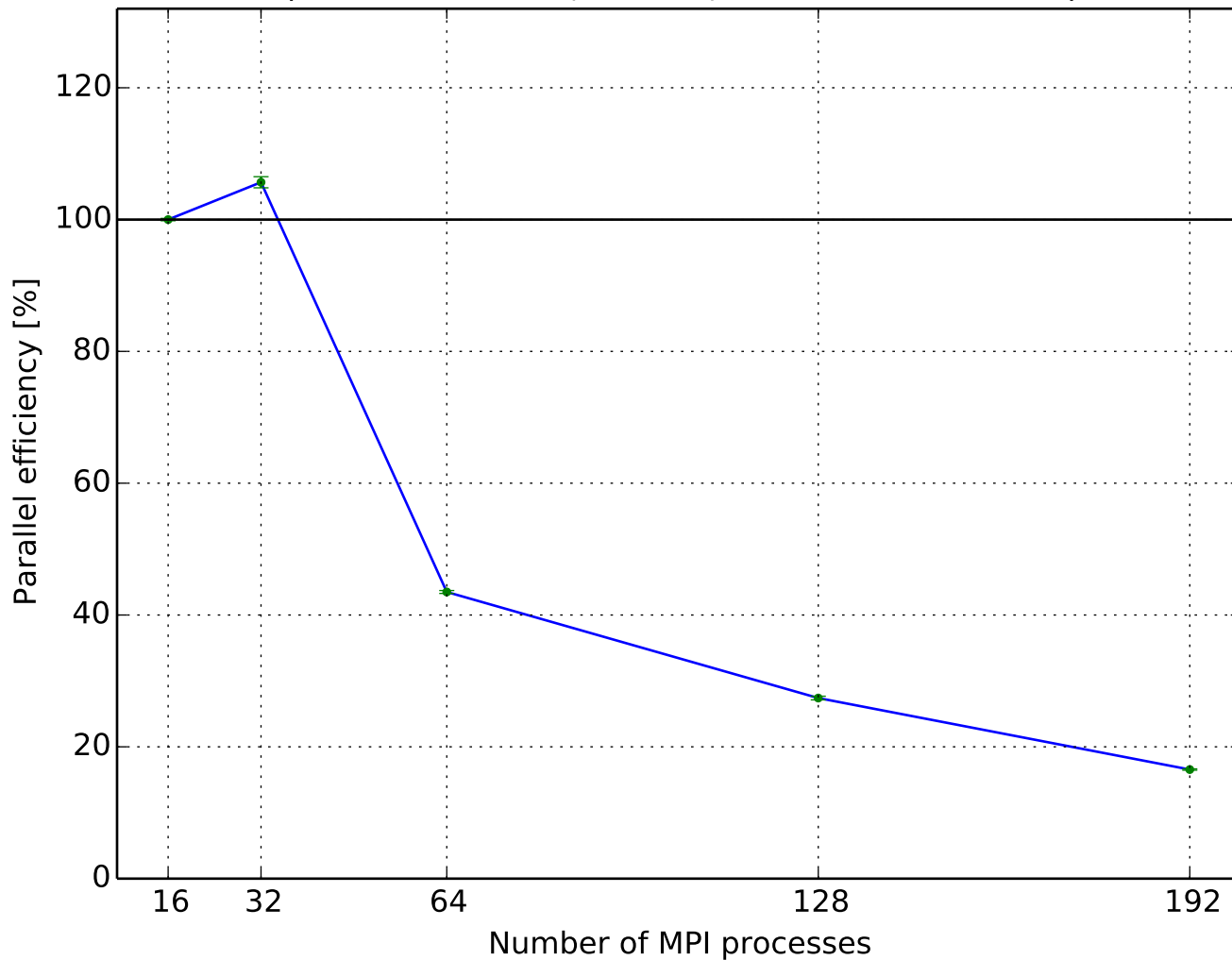
Execution time per time step
(0.74292M cells, WALE ,GAMG-GaussSeidel)



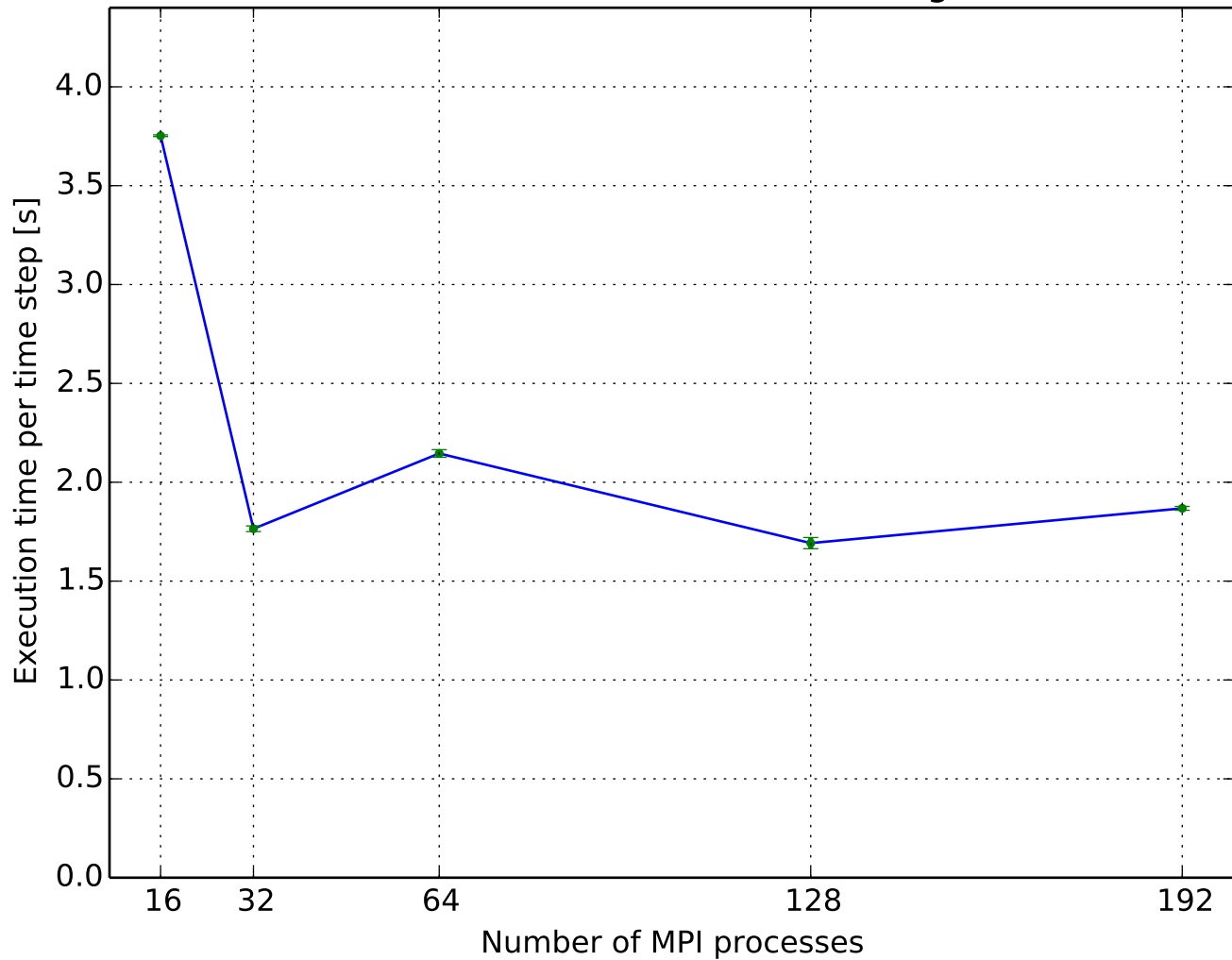
Speedup ratio
(0.74292M cells, WALE ,GAMG-GaussSeidel)



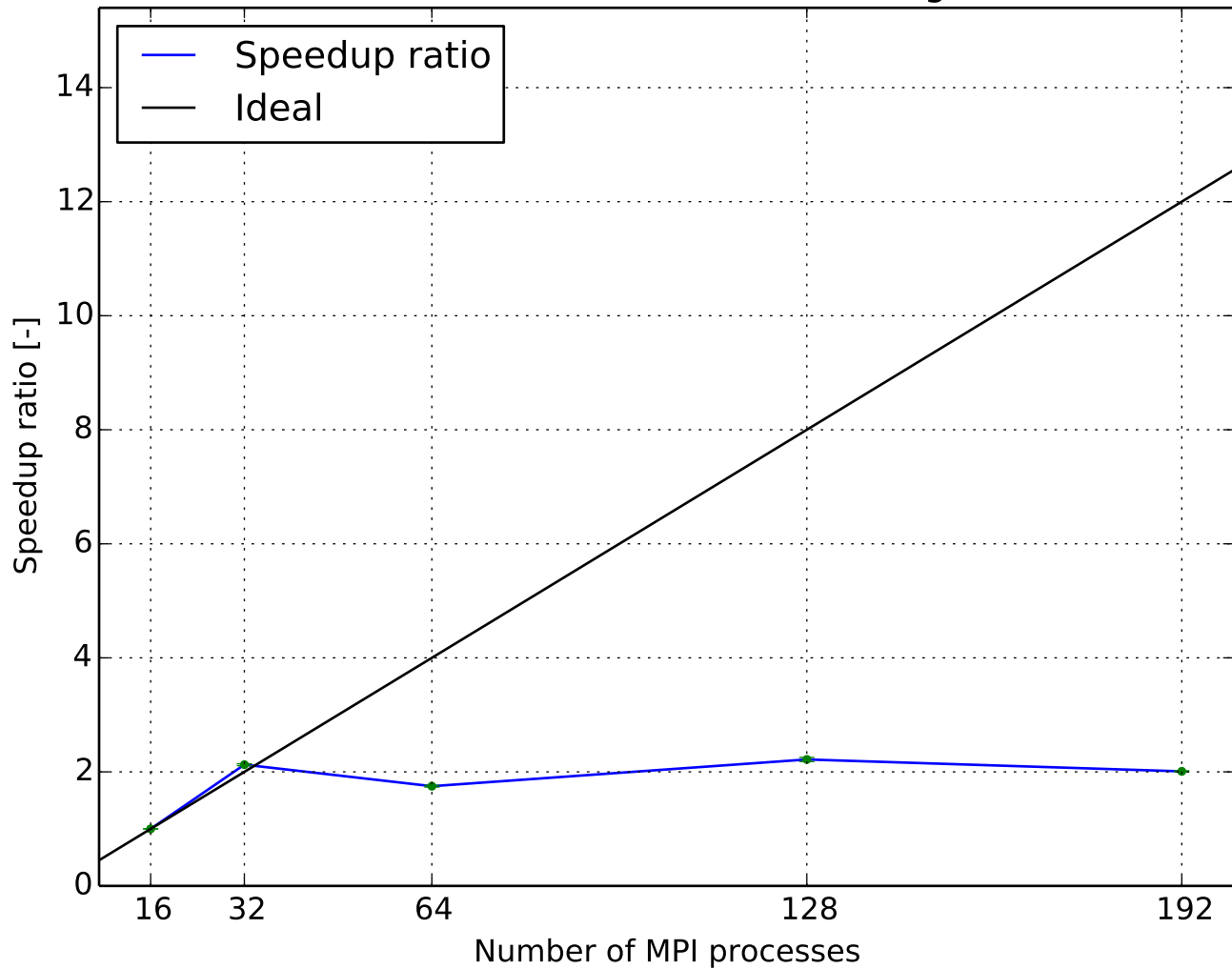
Parallel efficiency
(0.74292M cells, WALE ,GAMG-GaussSeidel)



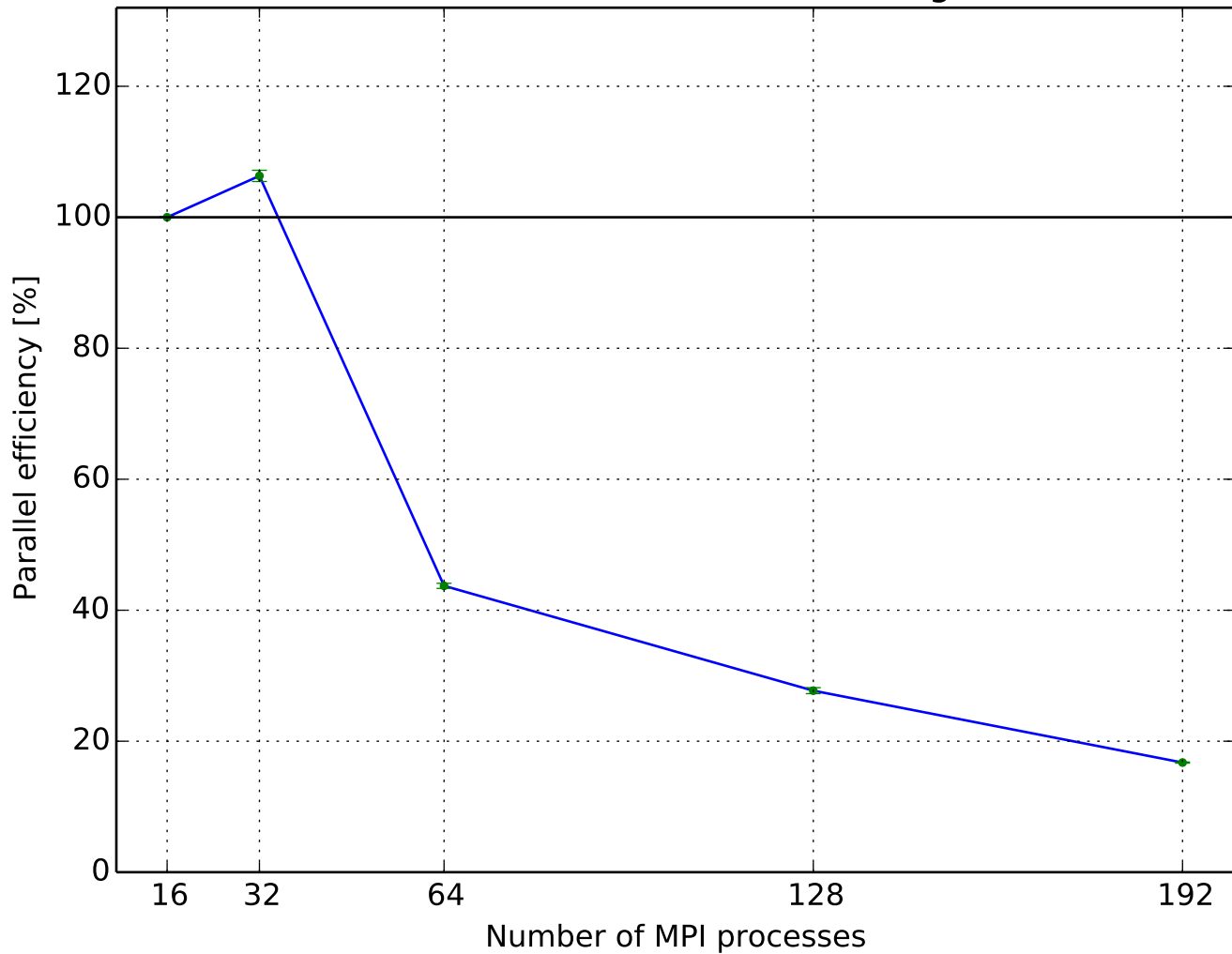
Execution time per time step
(0.74292M cells, WALE ,GAMG-nonBlockingGaussSeidel)



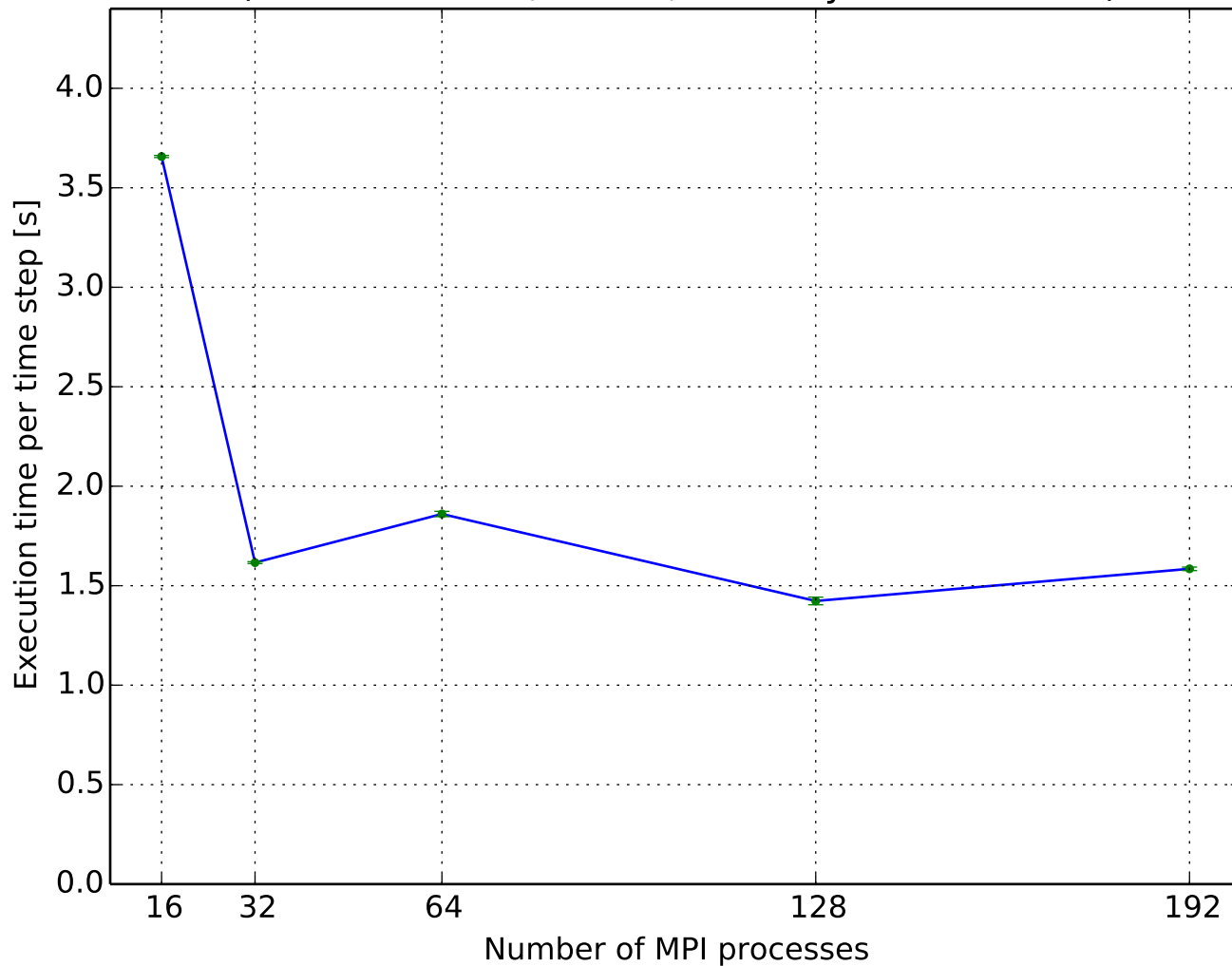
Speedup ratio
(0.74292M cells, WALE ,GAMG-nonBlockingGaussSeidel)



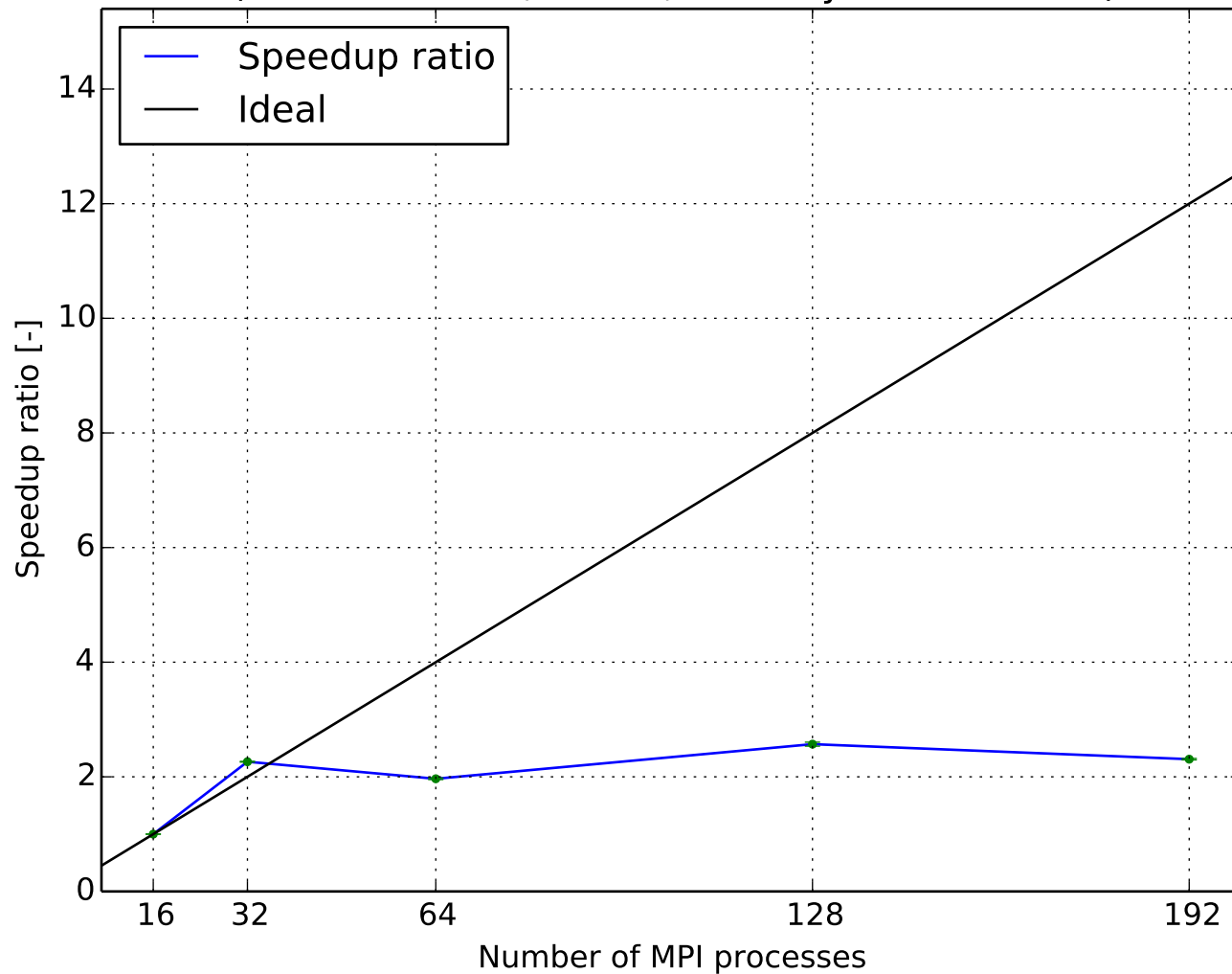
Parallel efficiency
(0.74292M cells, WALE ,GAMG-nonBlockingGaussSeidel)



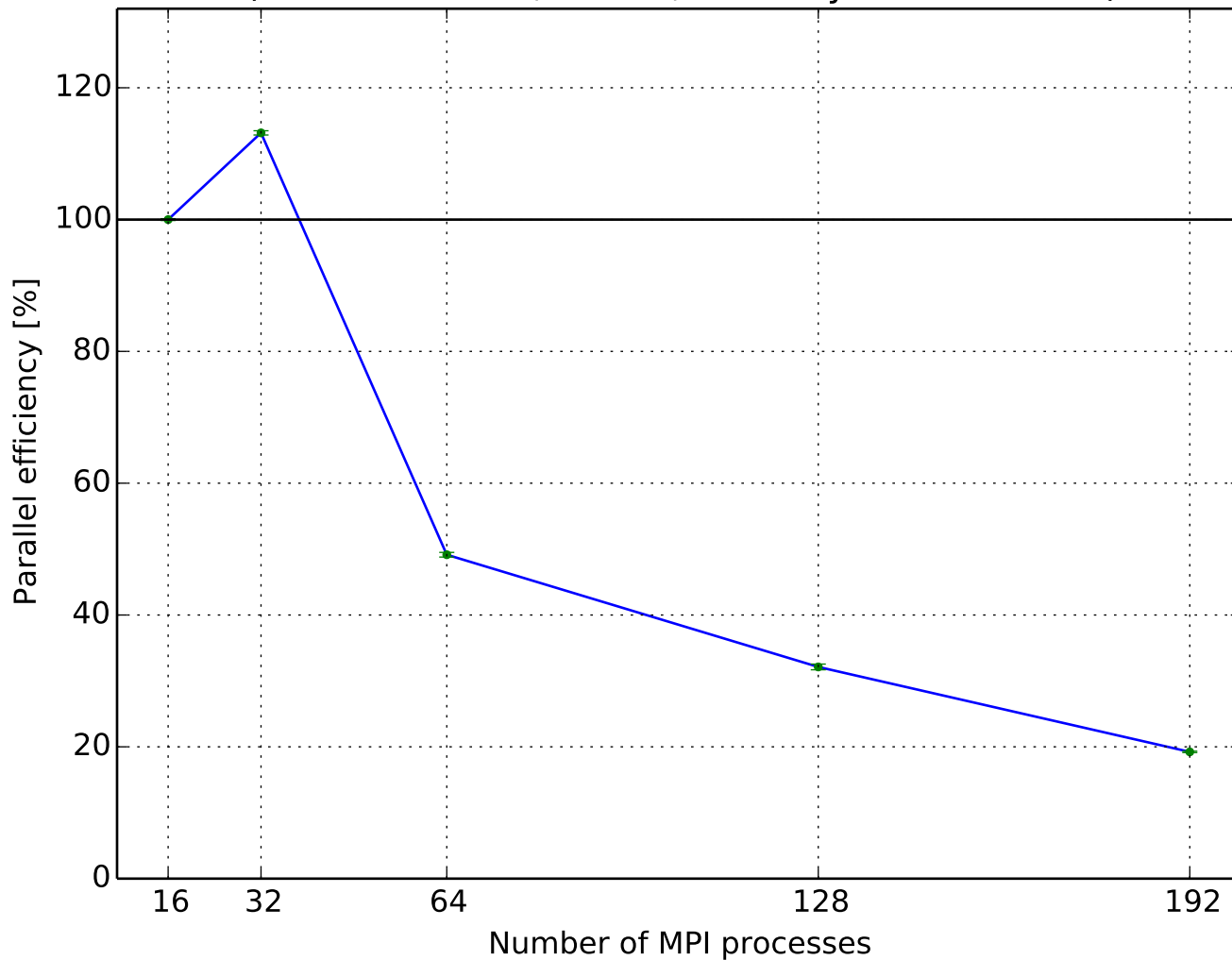
Execution time per time step
(0.74292M cells, WALE ,GAMG-symGaussSeidel)



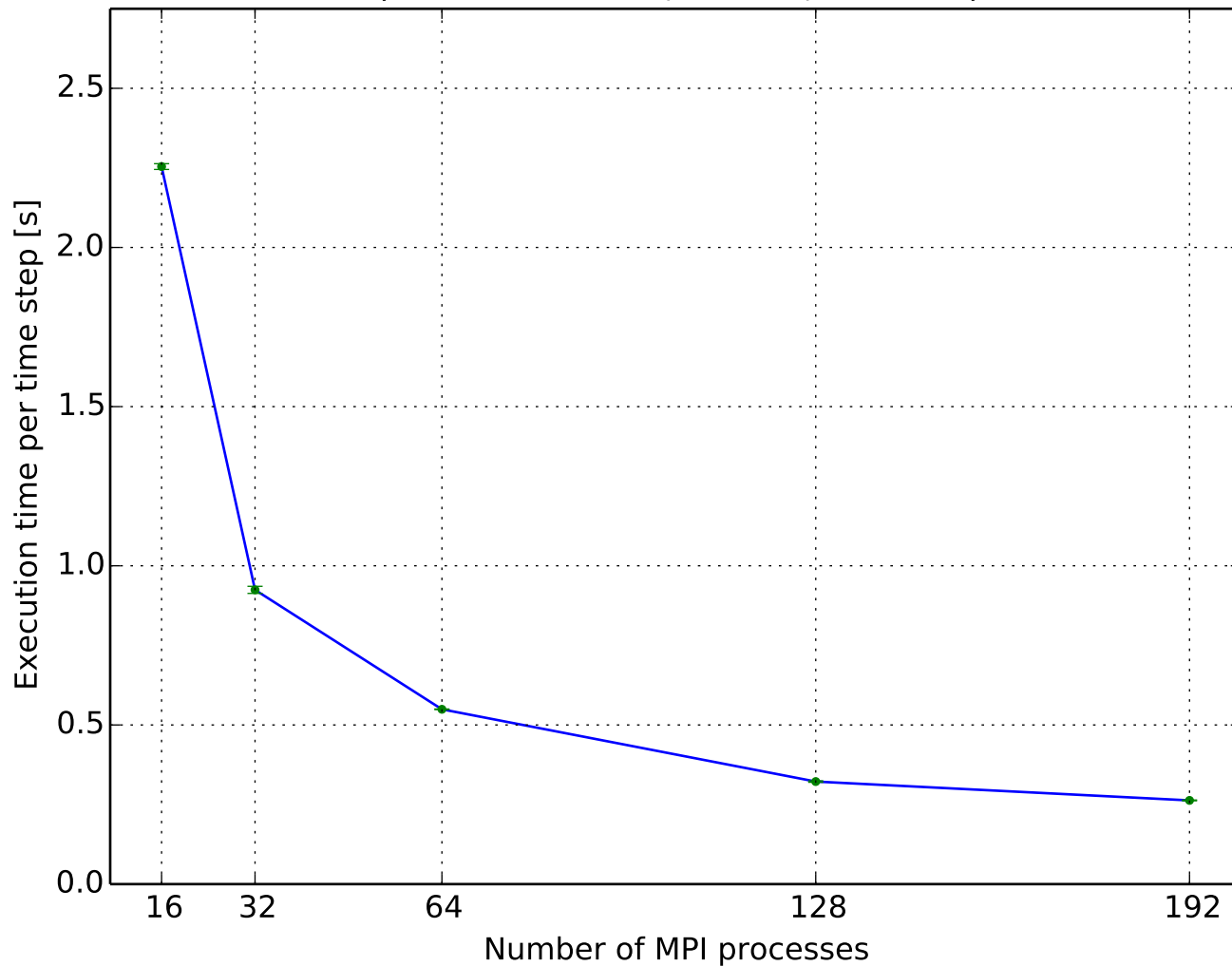
Speedup ratio
(0.74292M cells, WALE ,GAMG-symGaussSeidel)



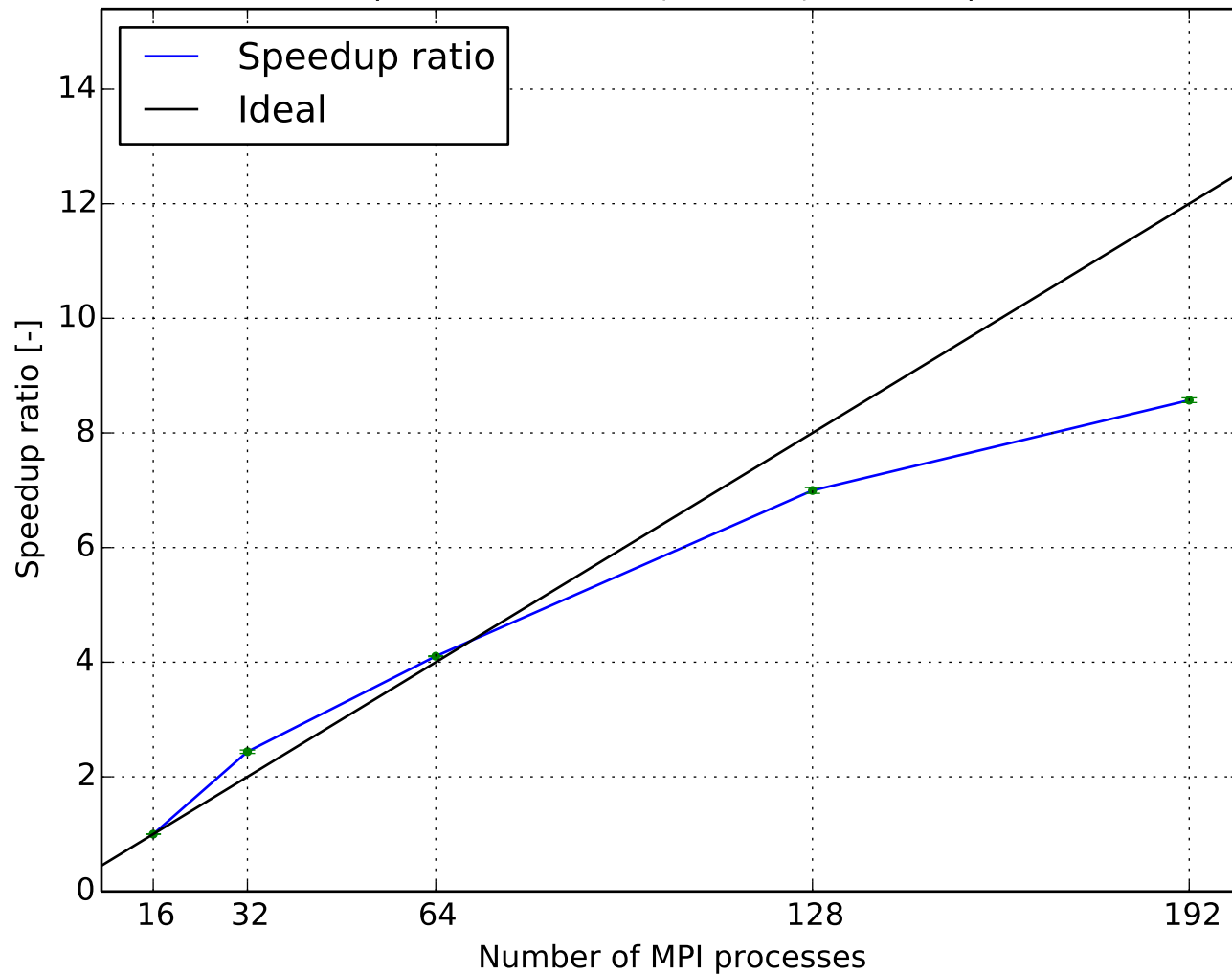
Parallel efficiency
(0.74292M cells, WALE ,GAMG-symGaussSeidel)



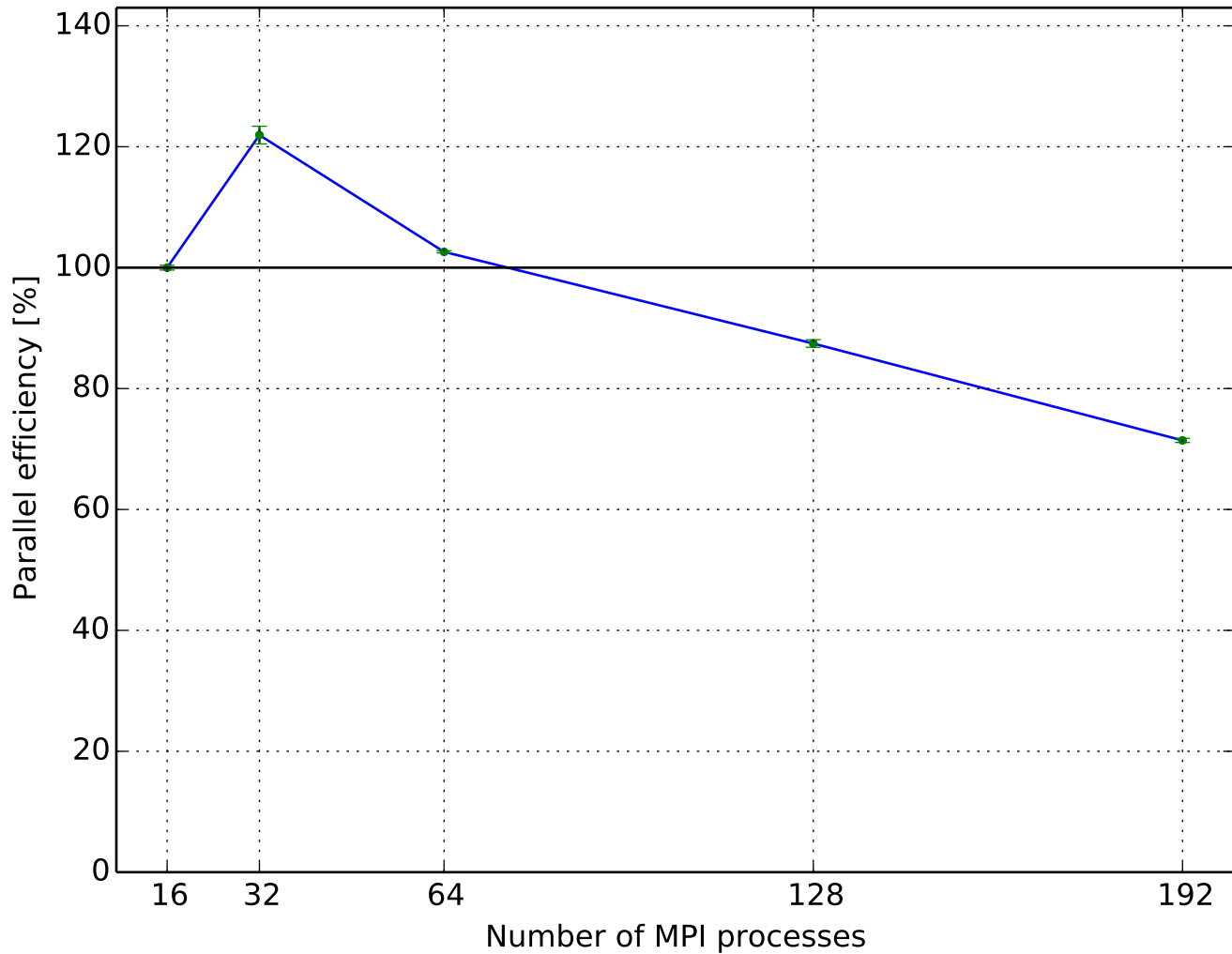
Execution time per time step
(0.74292M cells, WALE ,PCG-DIC)



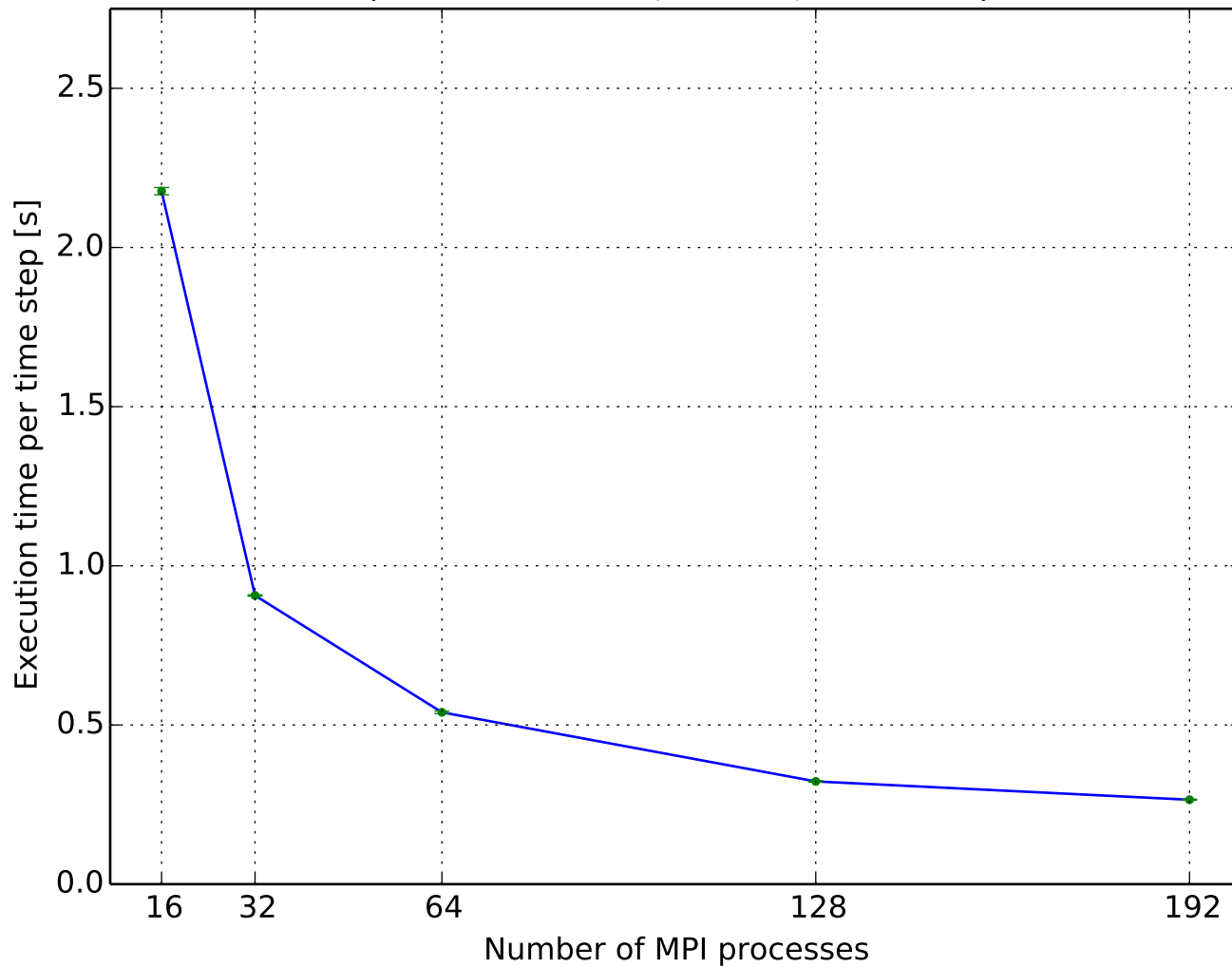
Speedup ratio
(0.74292M cells, WALE ,PCG-DIC)



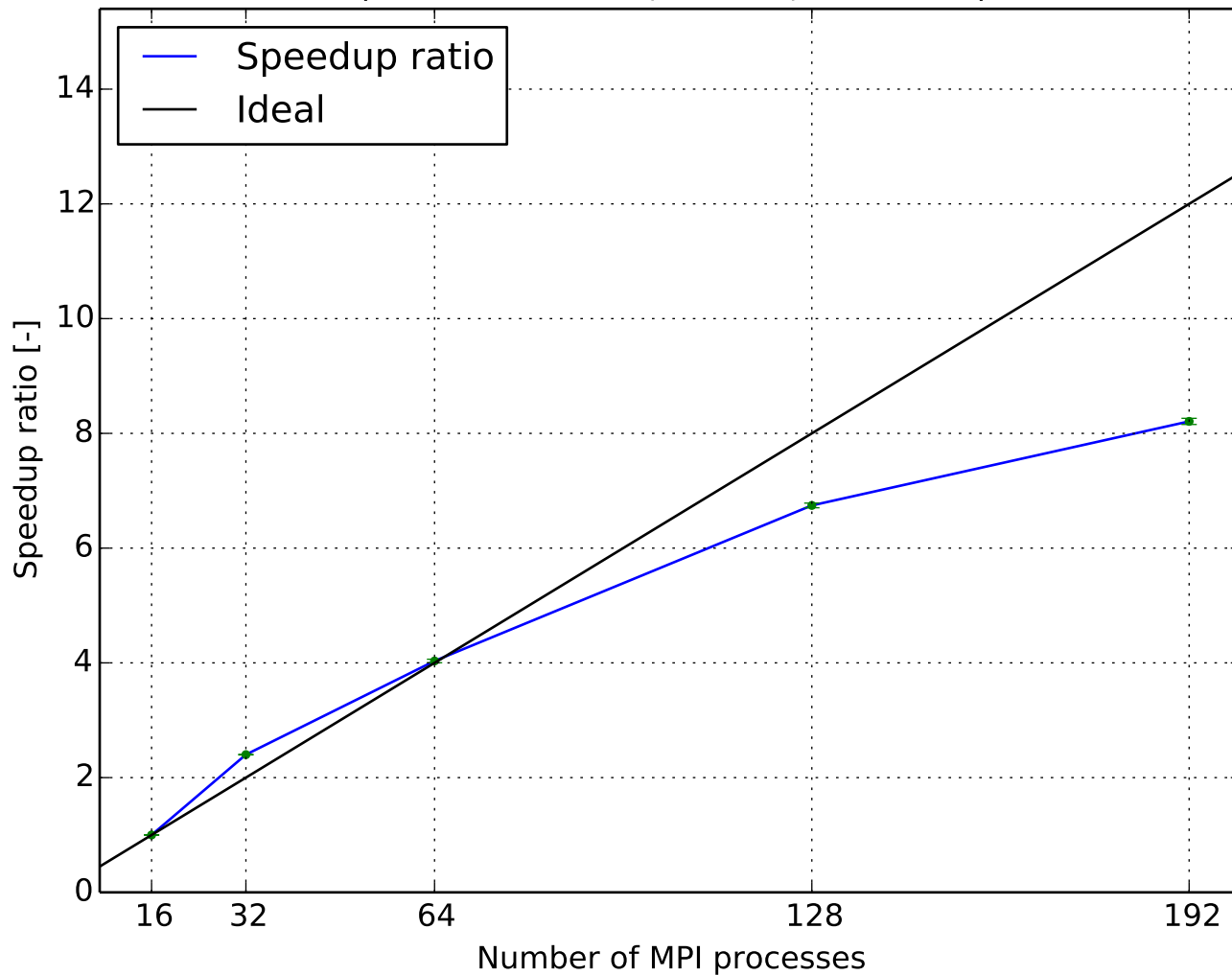
Parallel efficiency
(0.74292M cells, WALE ,PCG-DIC)



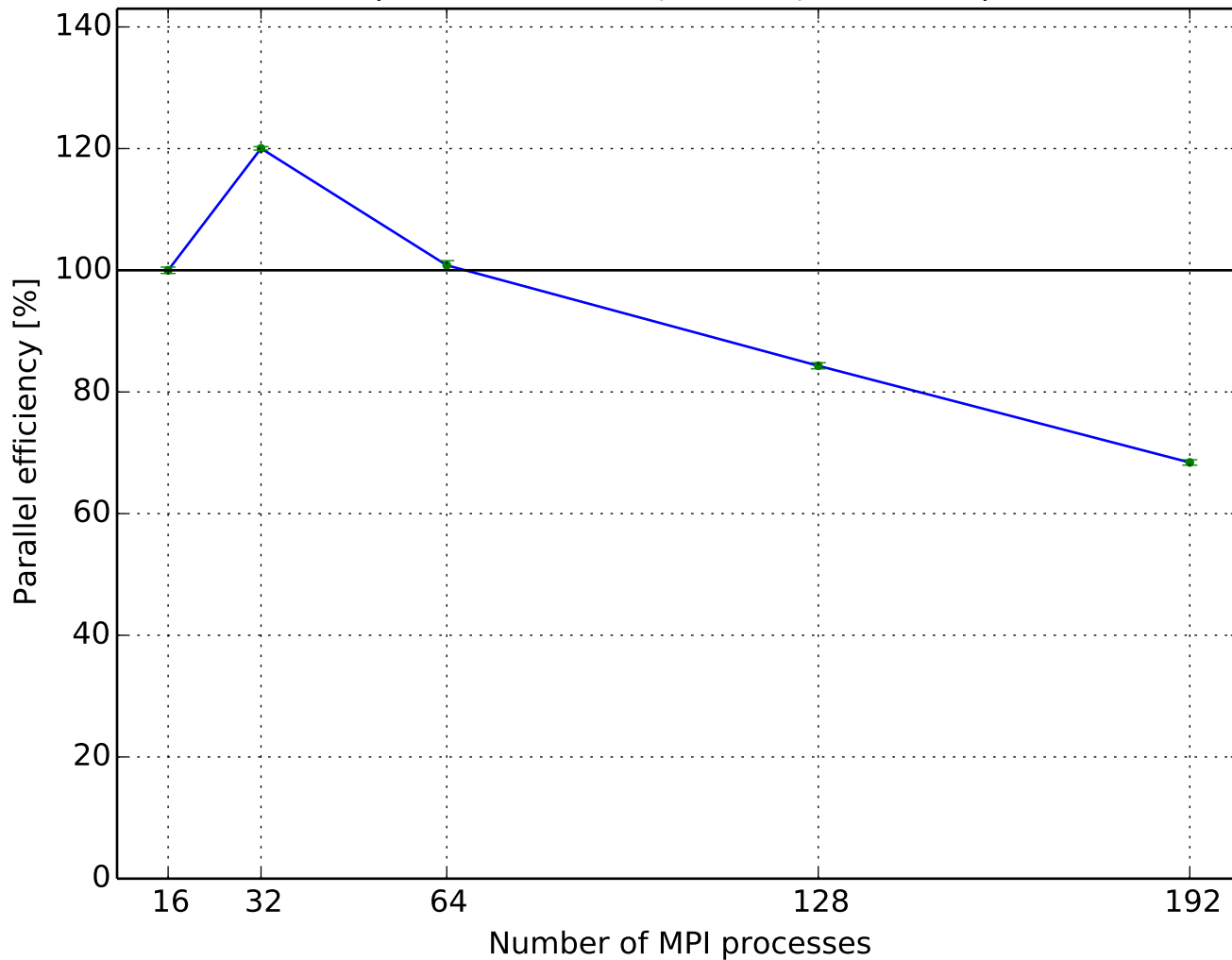
Execution time per time step
(0.74292M cells, WALE ,PCG-FDIC)



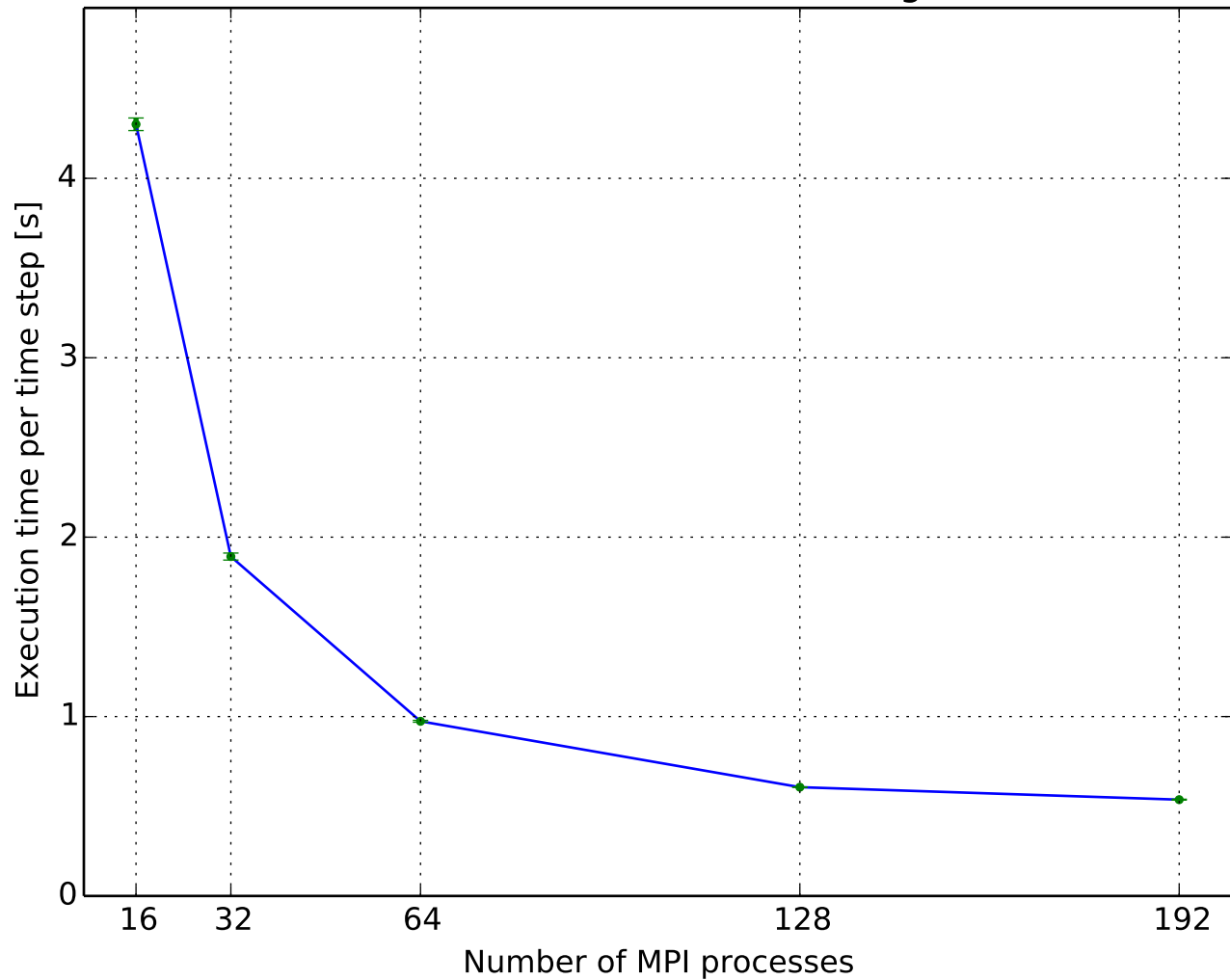
Speedup ratio
(0.74292M cells, WALE ,PCG-FDIC)



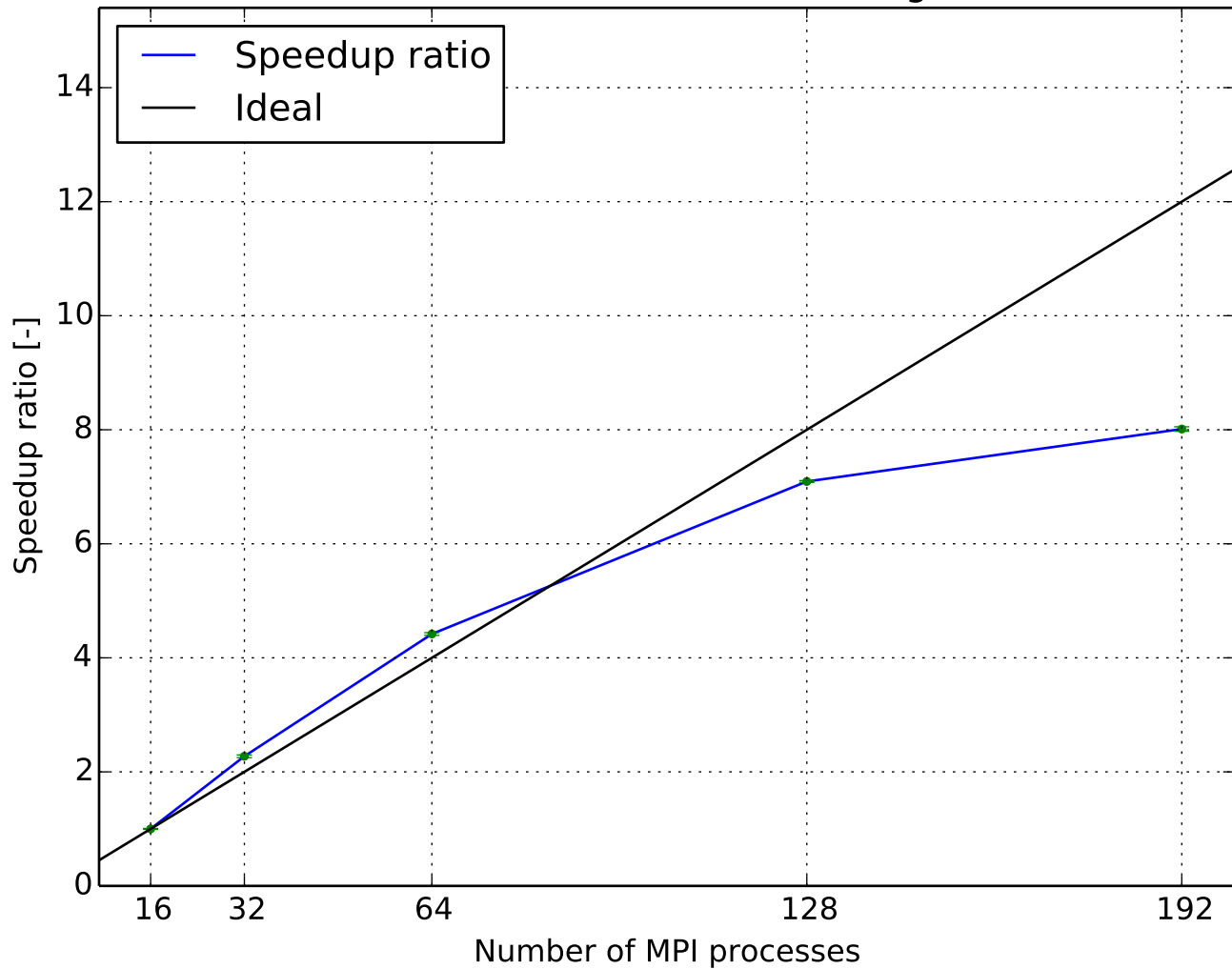
Parallel efficiency
(0.74292M cells, WALE ,PCG-FDIC)



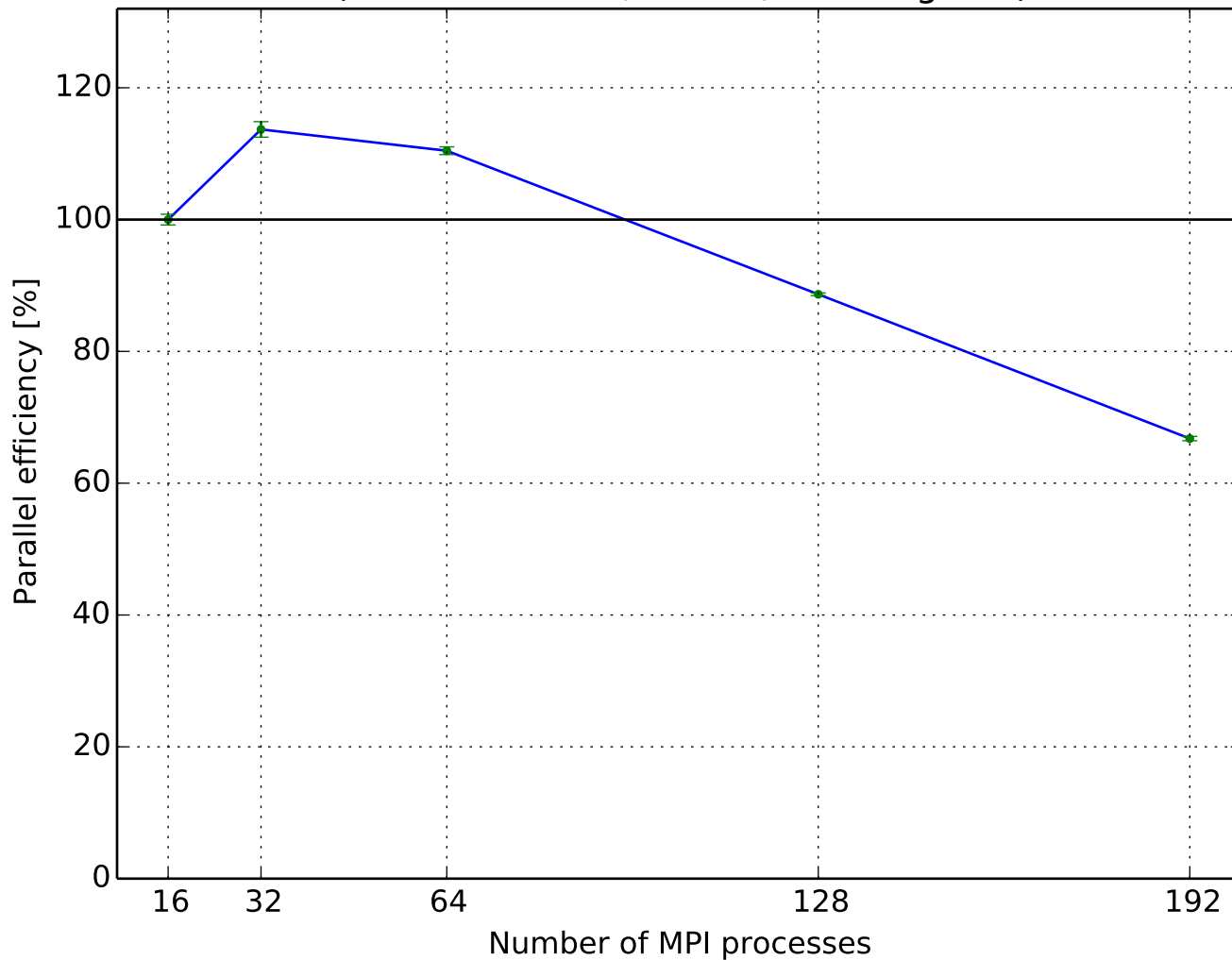
Execution time per time step
(0.74292M cells, WALE ,PCG-diagonal)



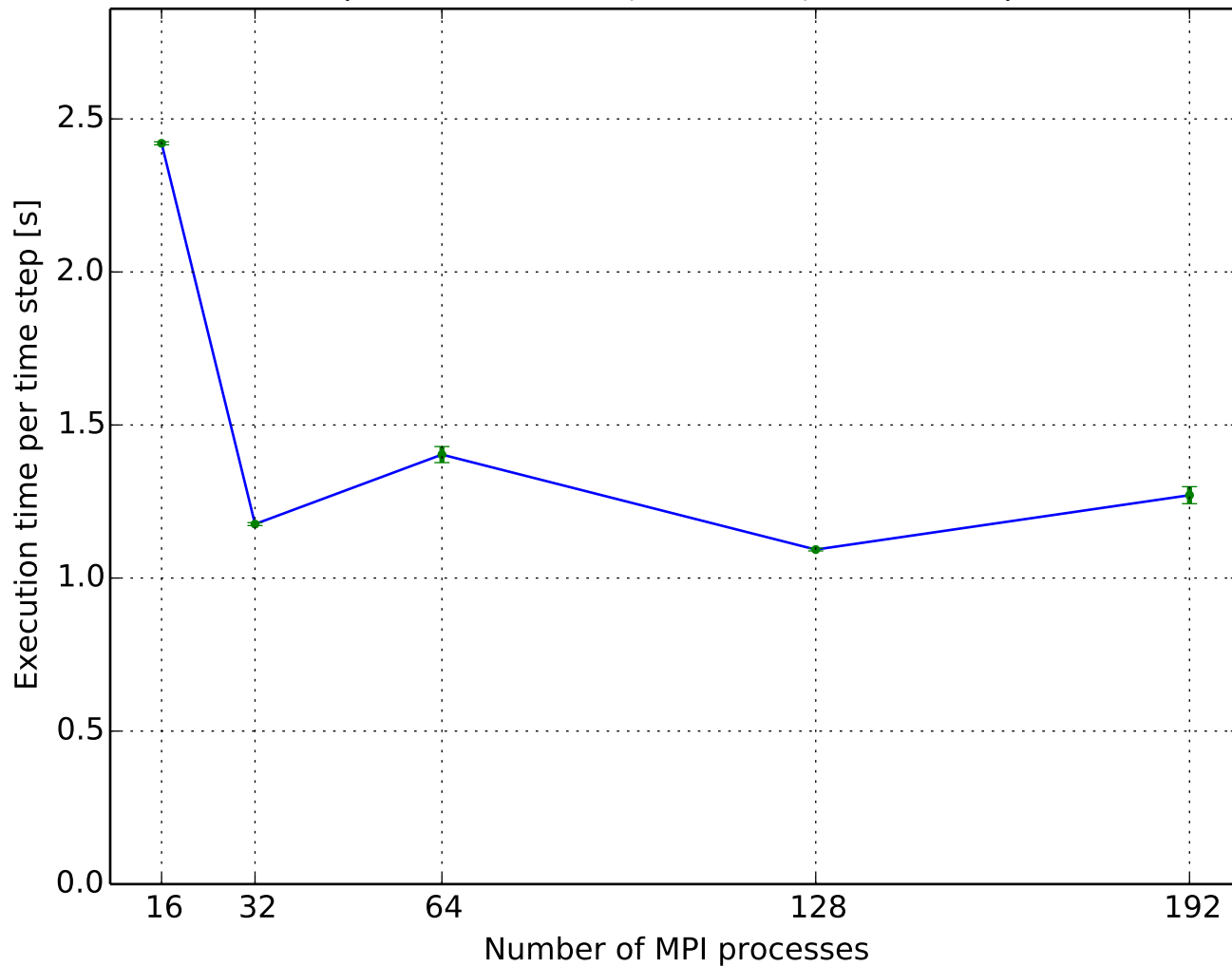
Speedup ratio
(0.74292M cells, WALE ,PCG-diagonal)



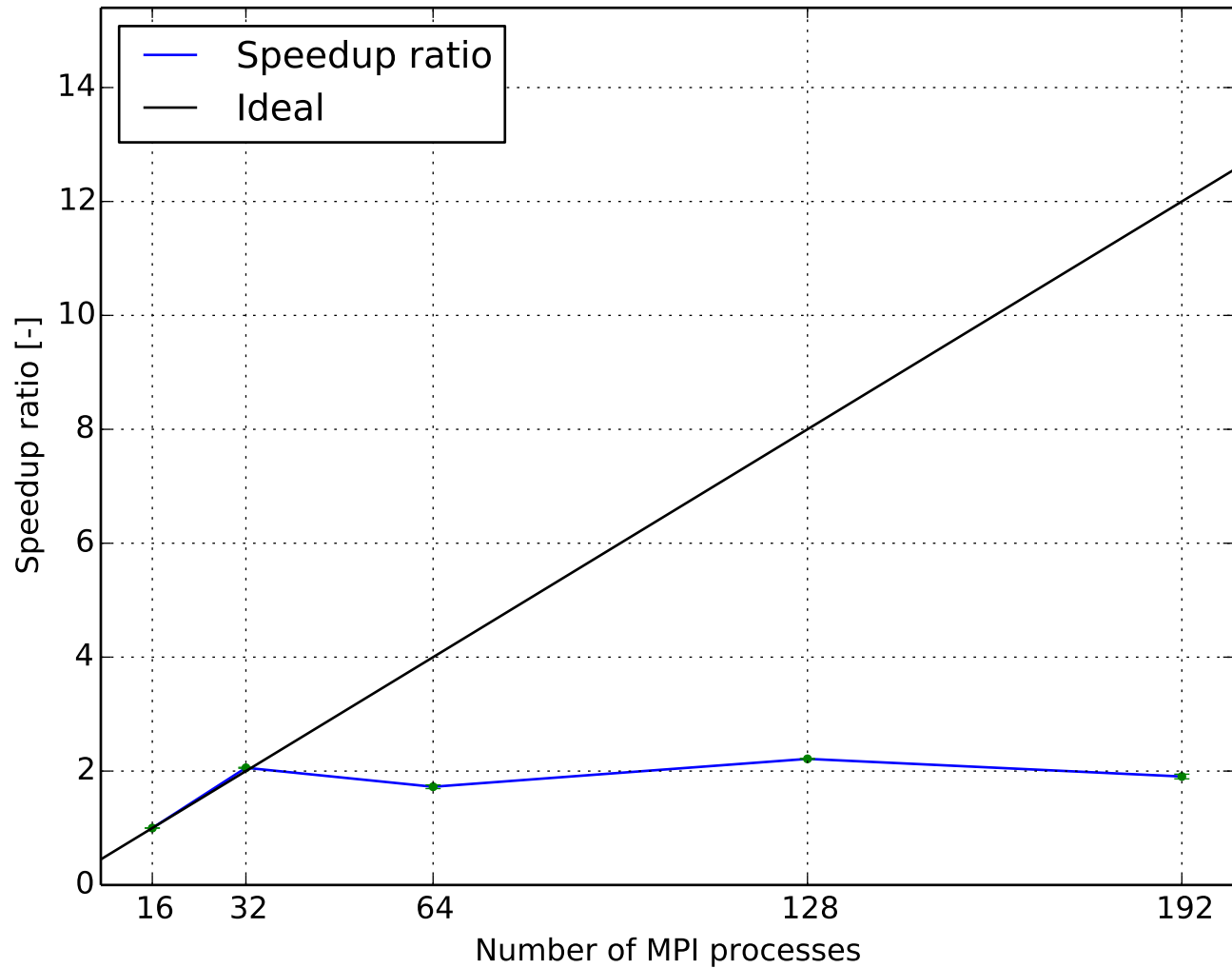
Parallel efficiency
(0.74292M cells, WALE ,PCG-diagonal)



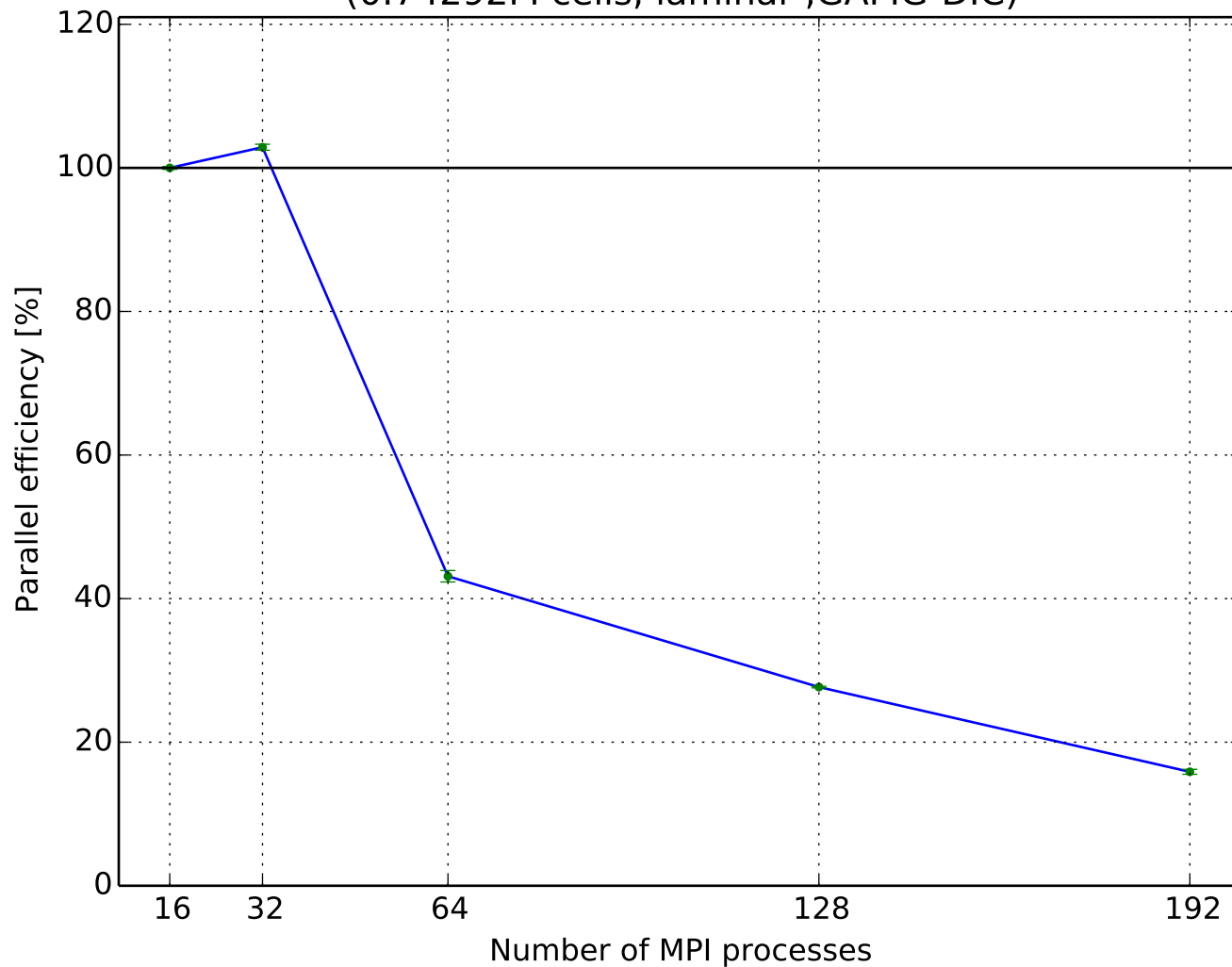
Execution time per time step
(0.74292M cells, laminar ,GAMG-DIC)



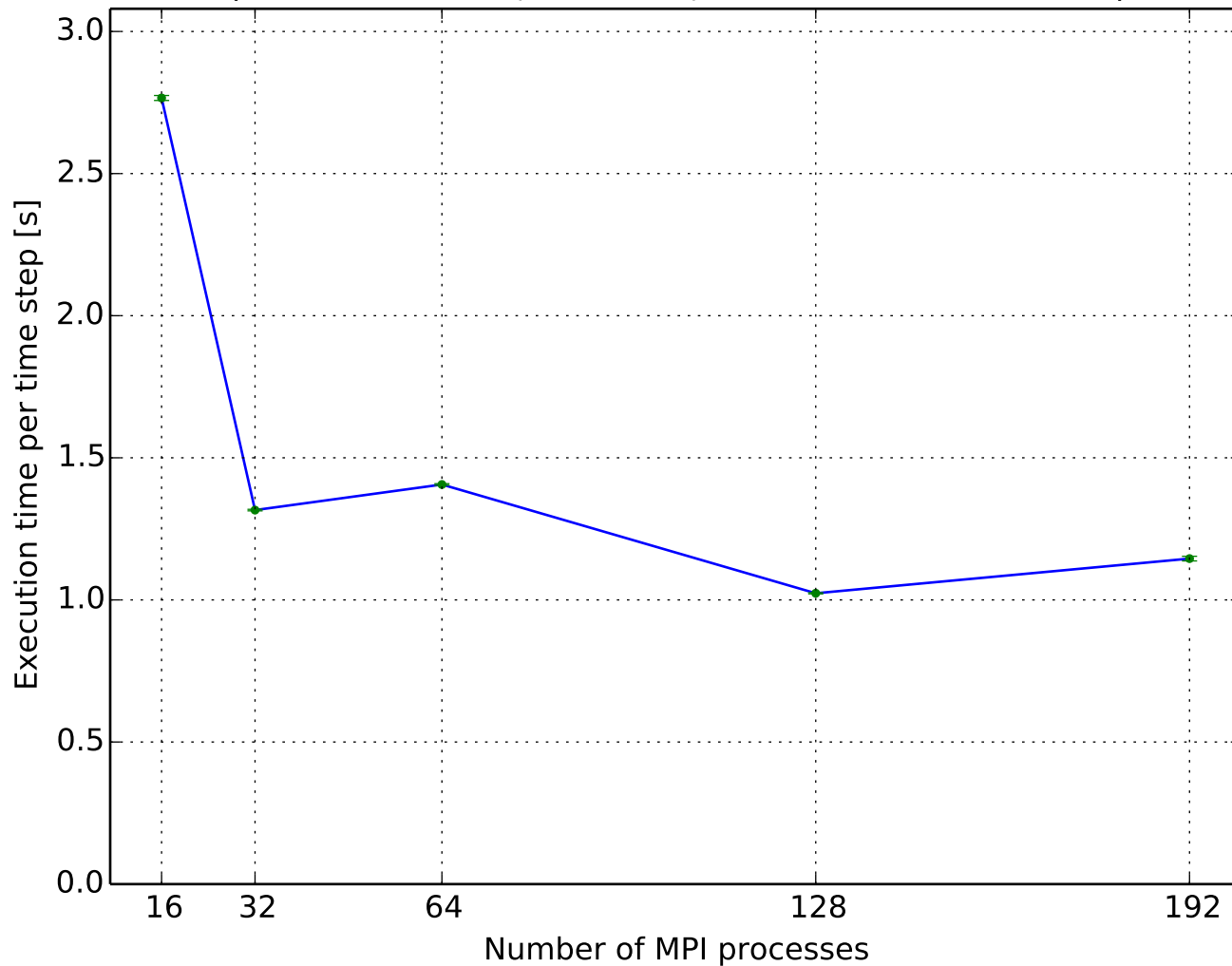
Speedup ratio
(0.74292M cells, laminar ,GAMG-DIC)



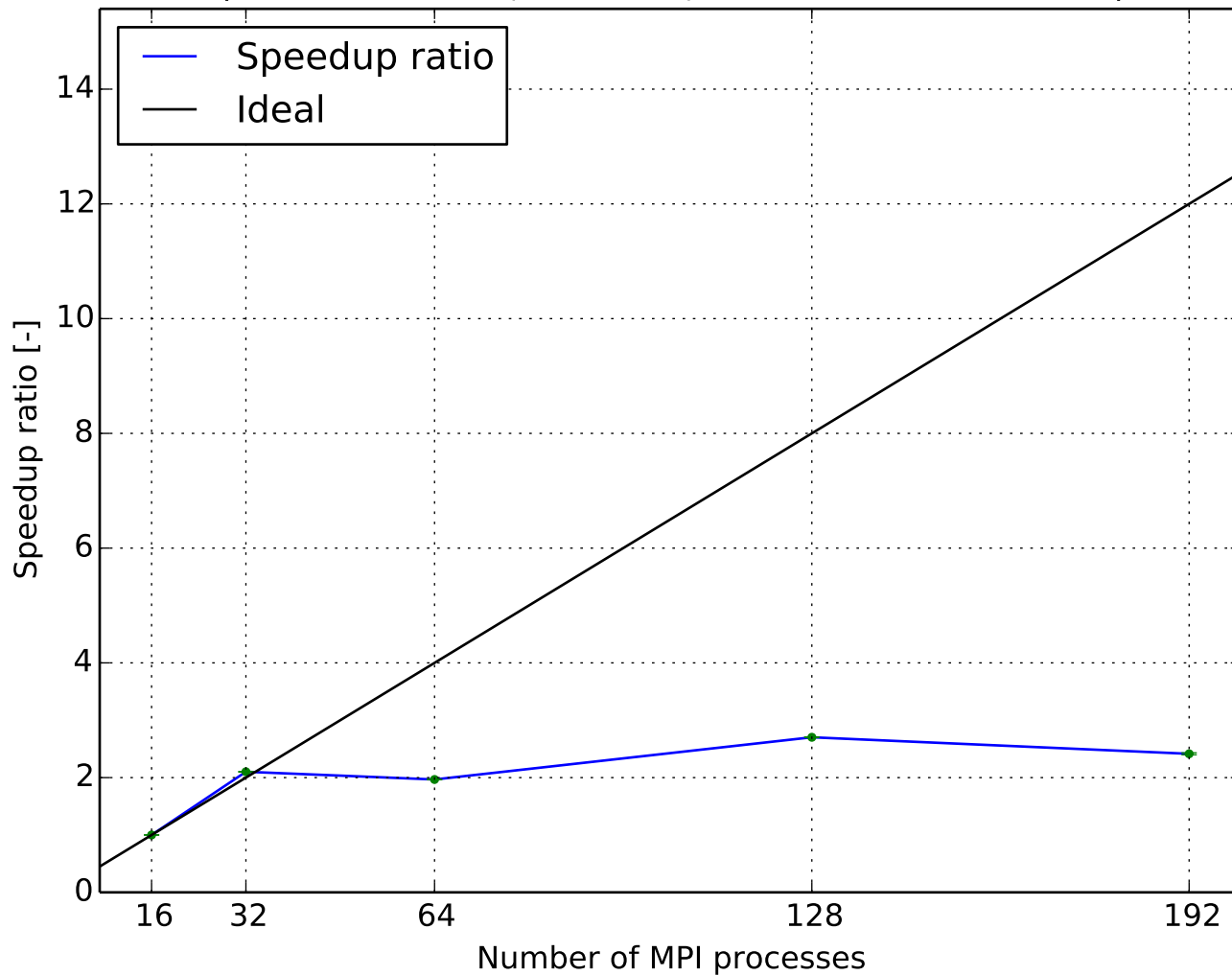
Parallel efficiency
(0.74292M cells, laminar ,GAMG-DIC)



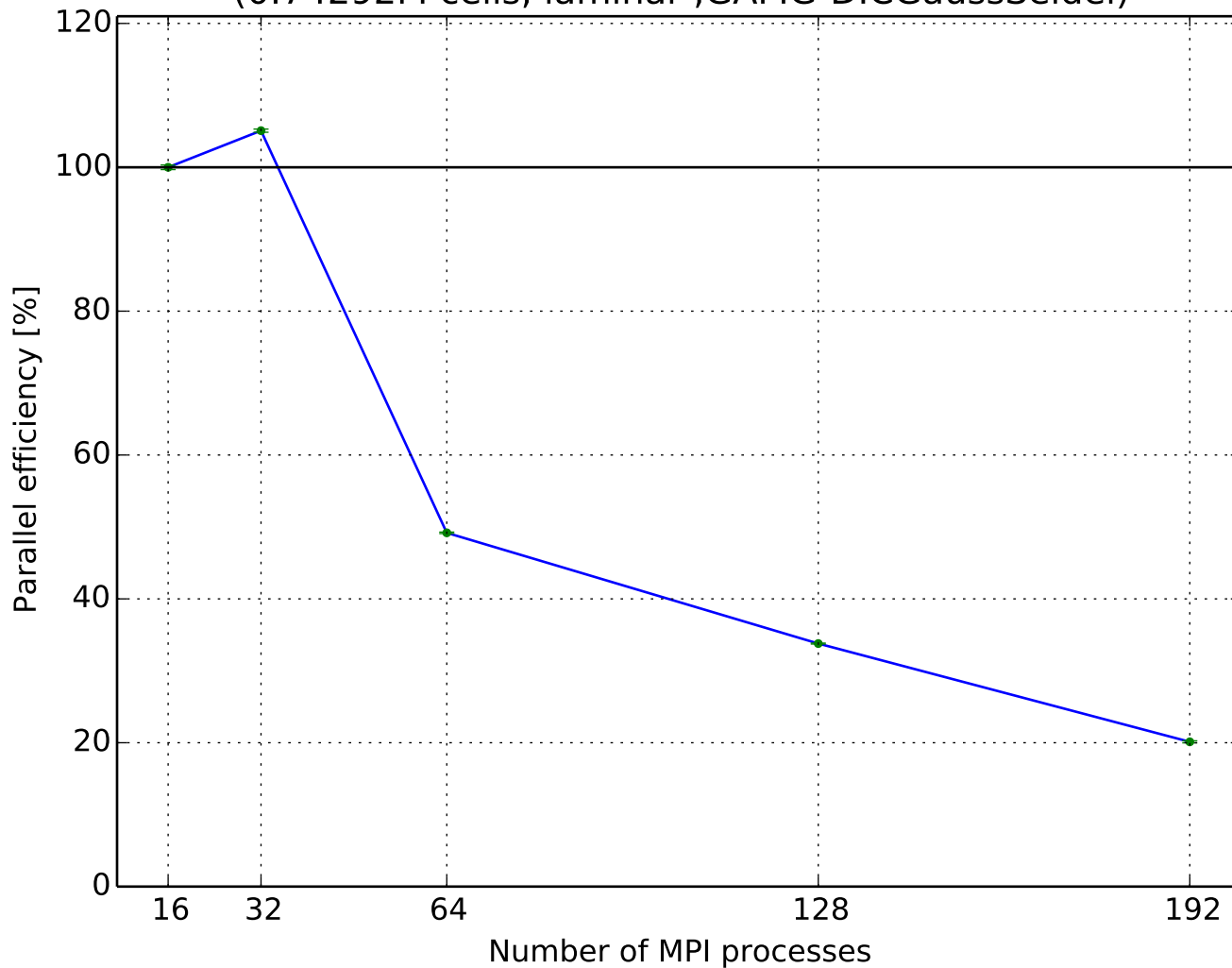
Execution time per time step
(0.74292M cells, laminar ,GAMG-DICGaussSeidel)



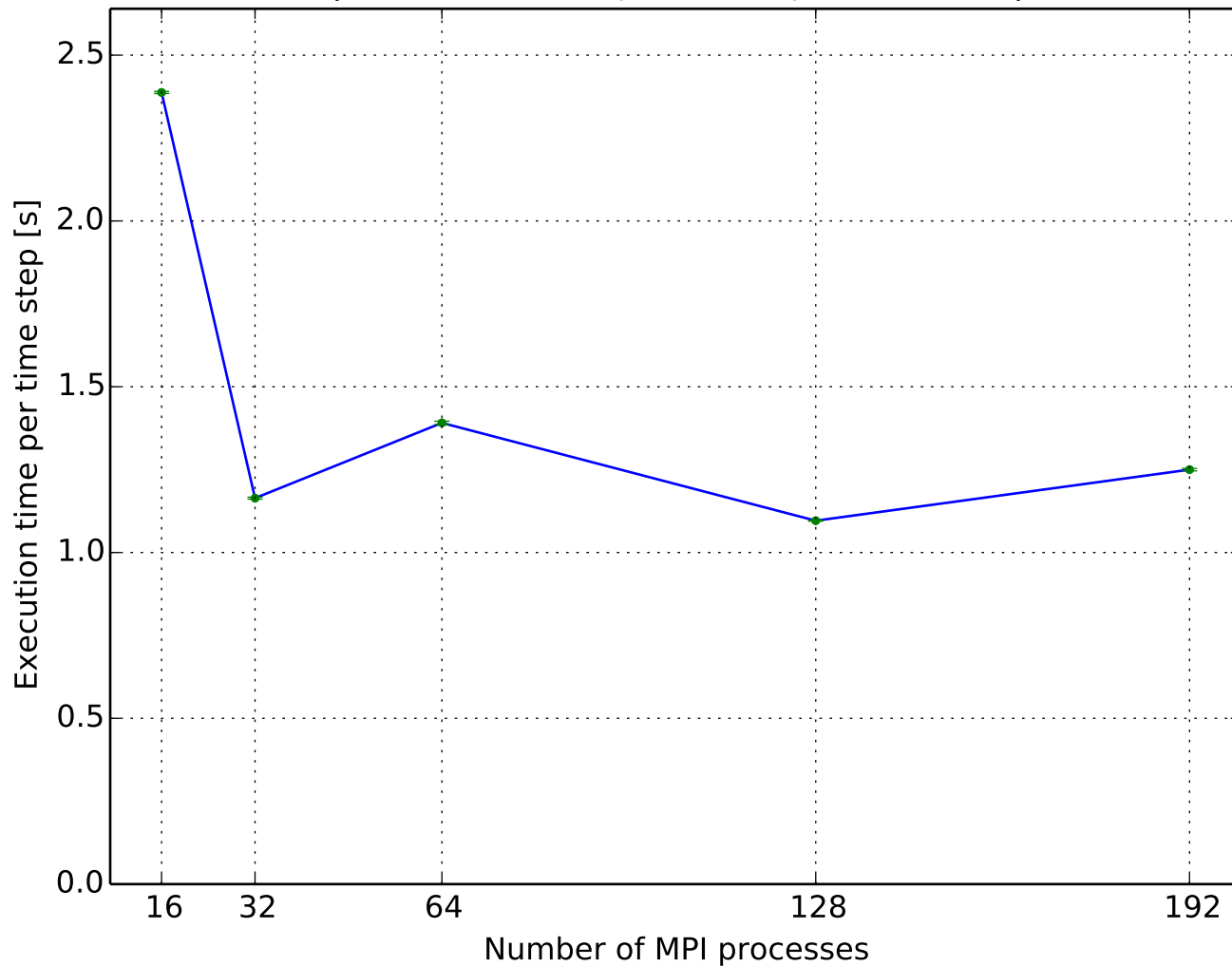
Speedup ratio
(0.74292M cells, laminar ,GAMG-DICGaussSeidel)



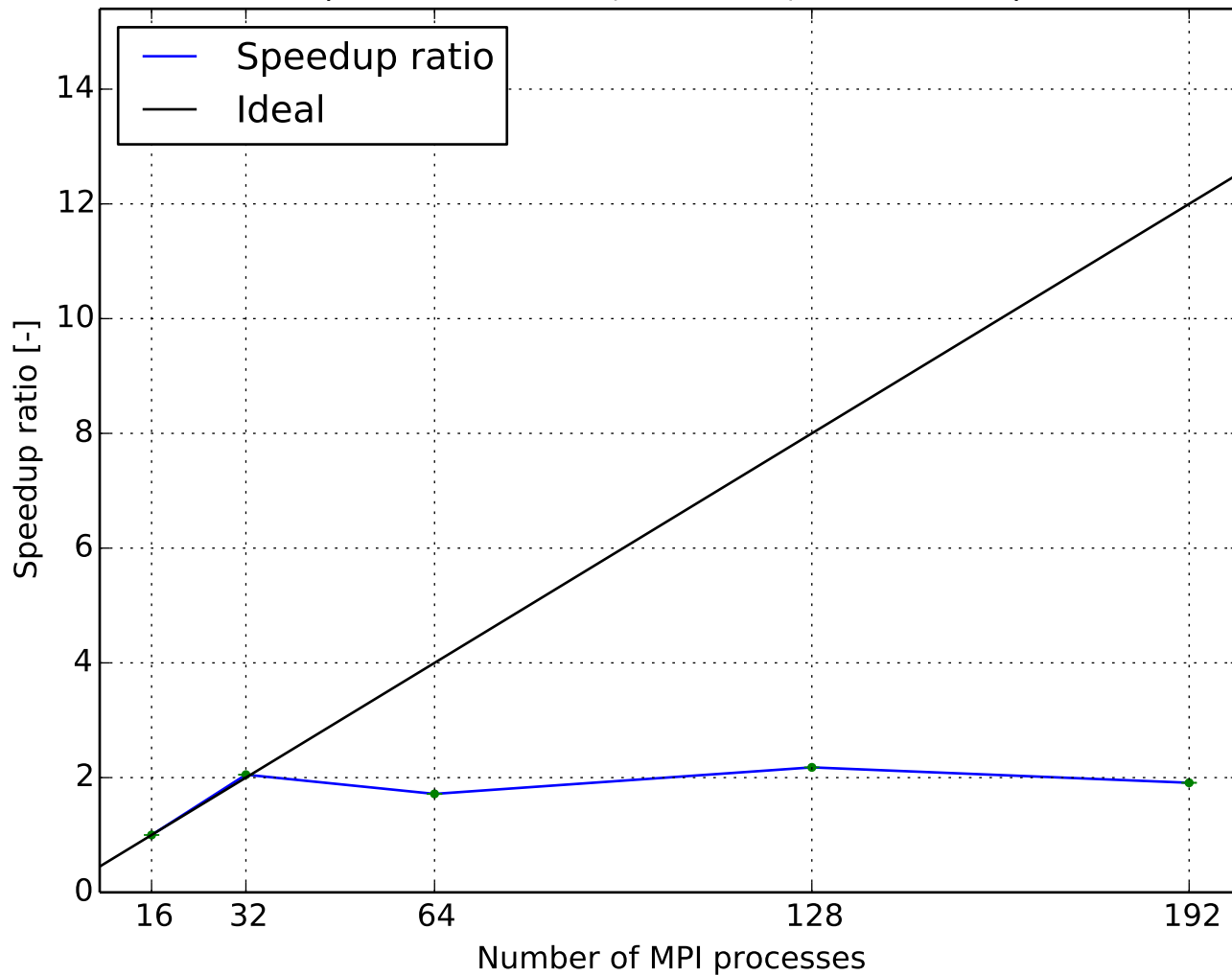
Parallel efficiency
(0.74292M cells, laminar ,GAMG-DICGaussSeidel)



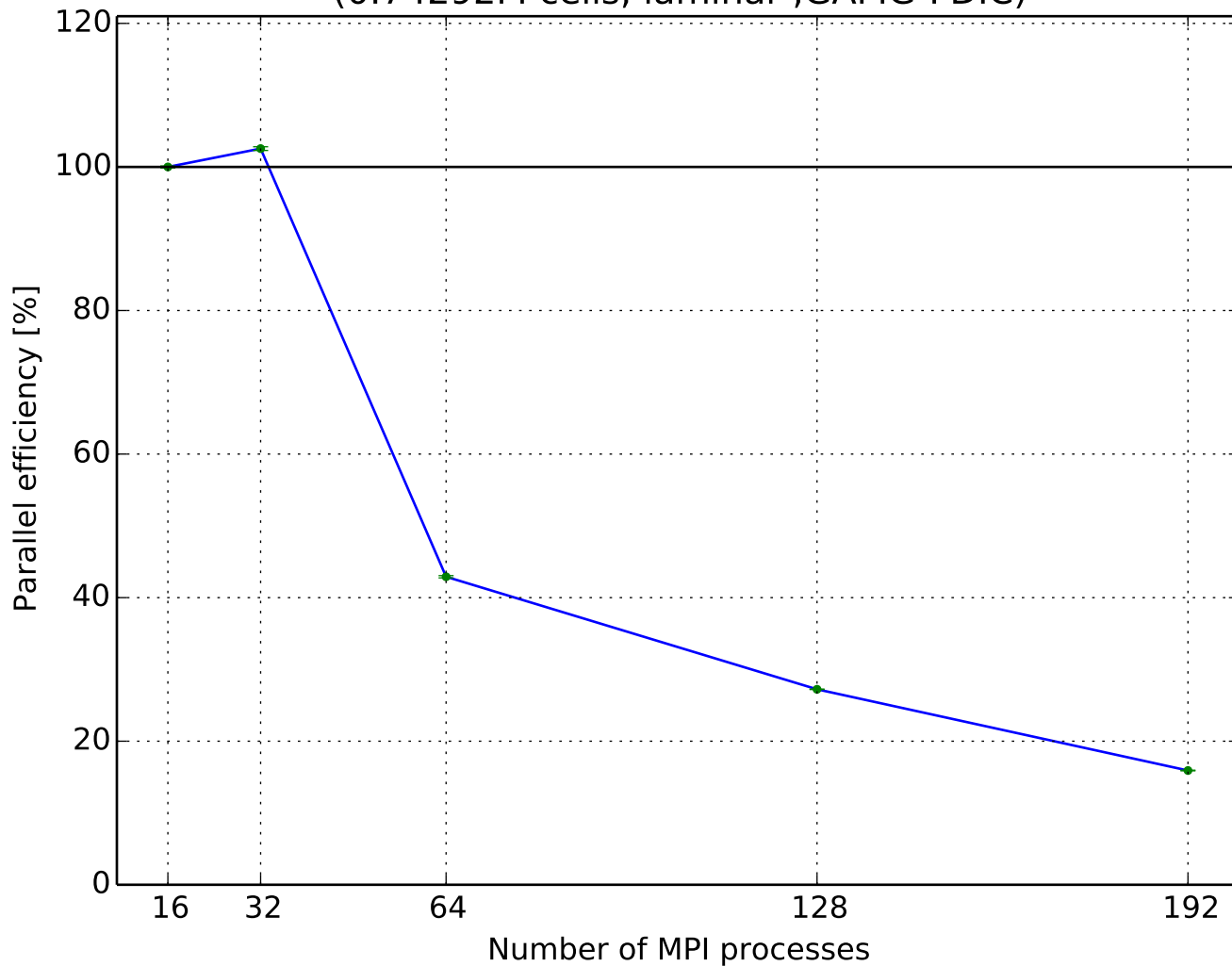
Execution time per time step
(0.74292M cells, laminar ,GAMG-FDIC)



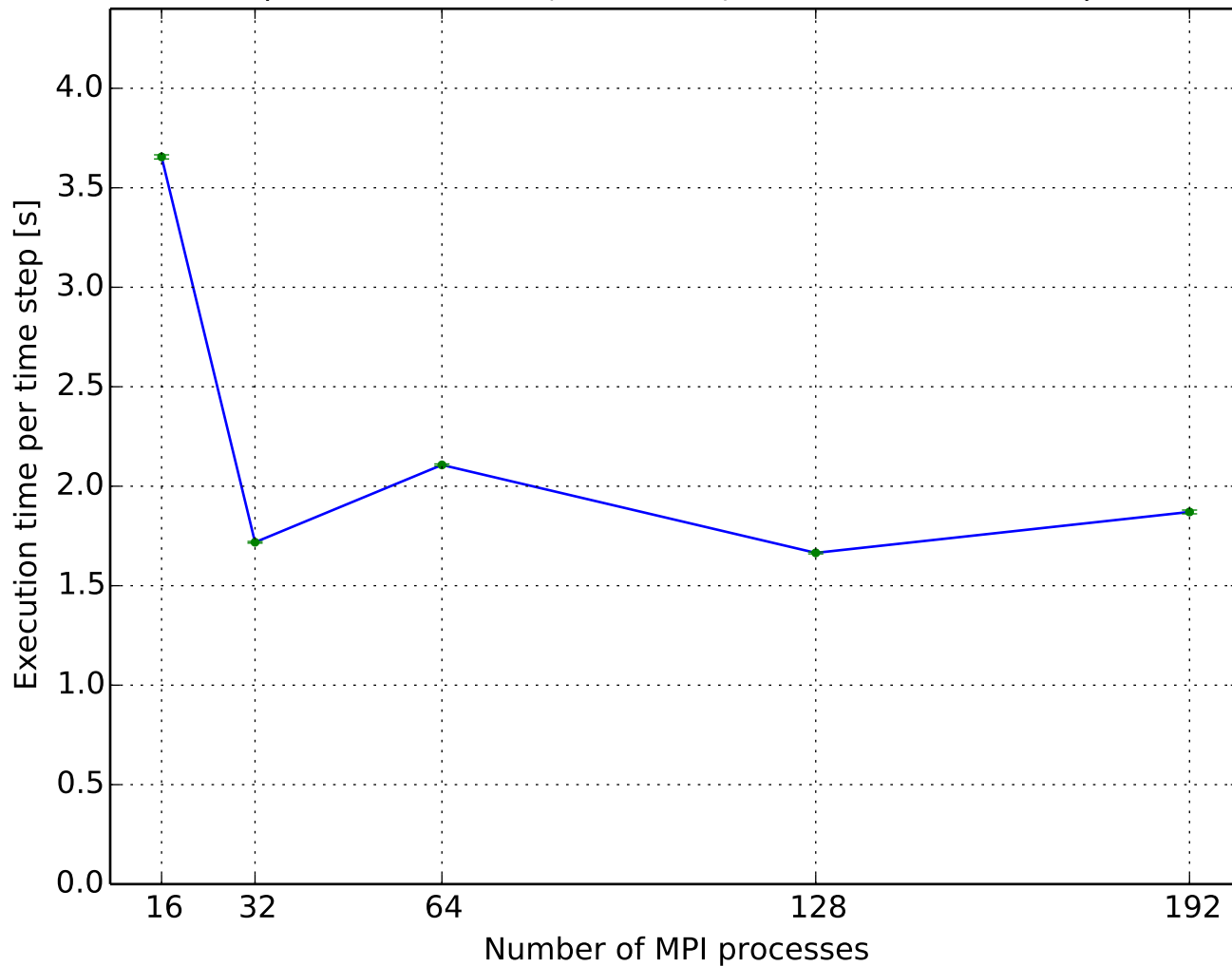
Speedup ratio
(0.74292M cells, laminar ,GAMG-FDIC)



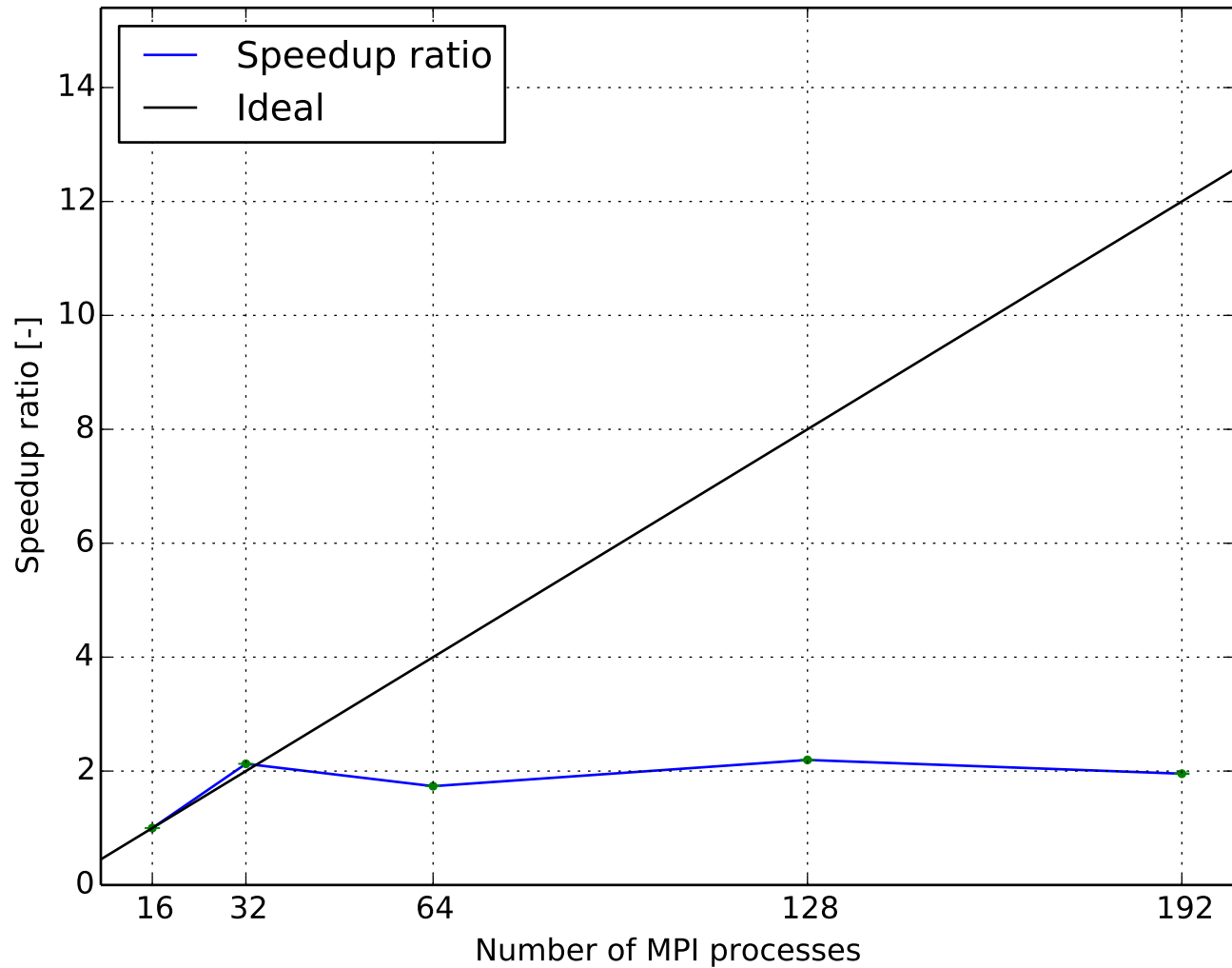
Parallel efficiency
(0.74292M cells, laminar ,GAMG-FDIC)



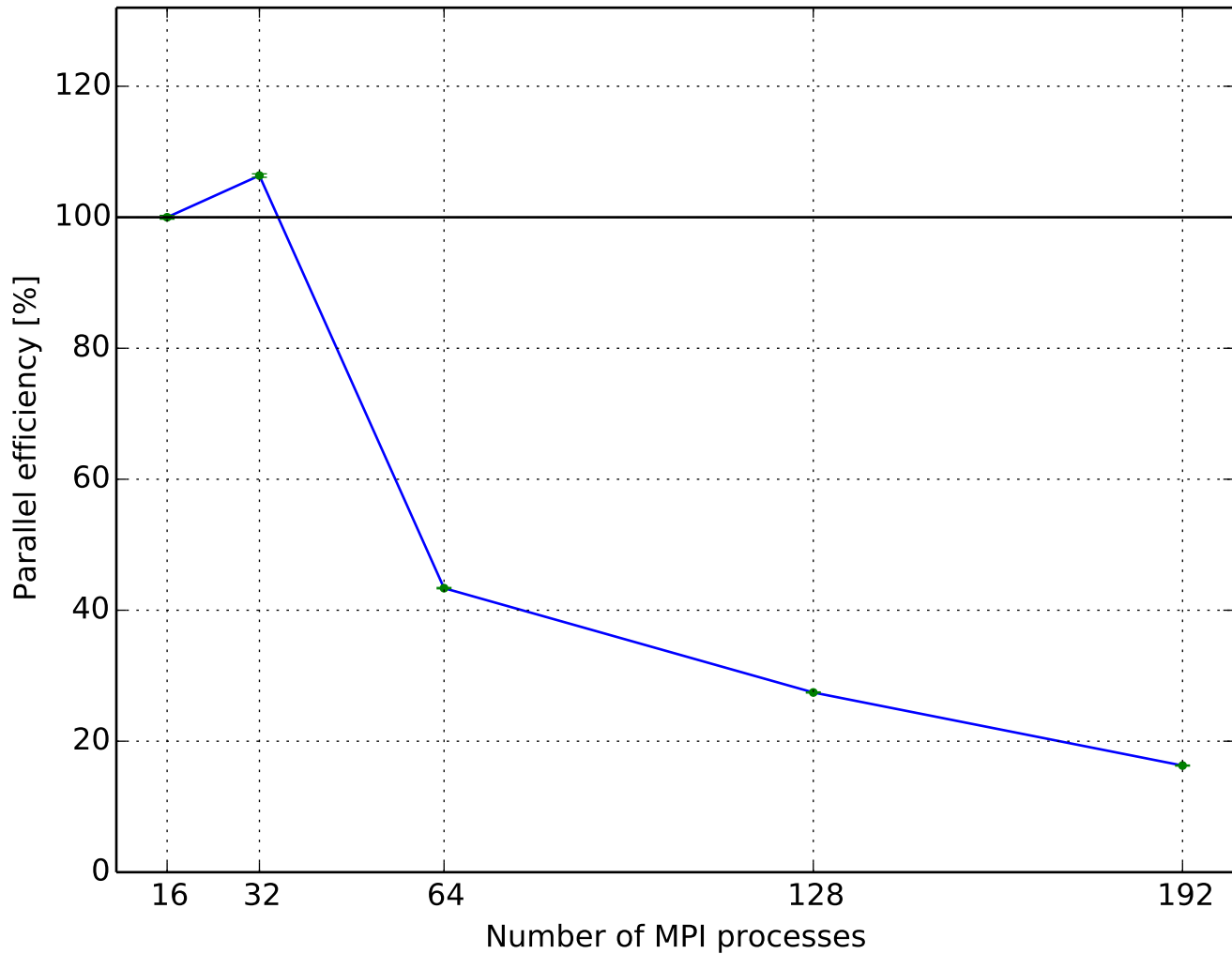
Execution time per time step
(0.74292M cells, laminar ,GAMG-GaussSeidel)



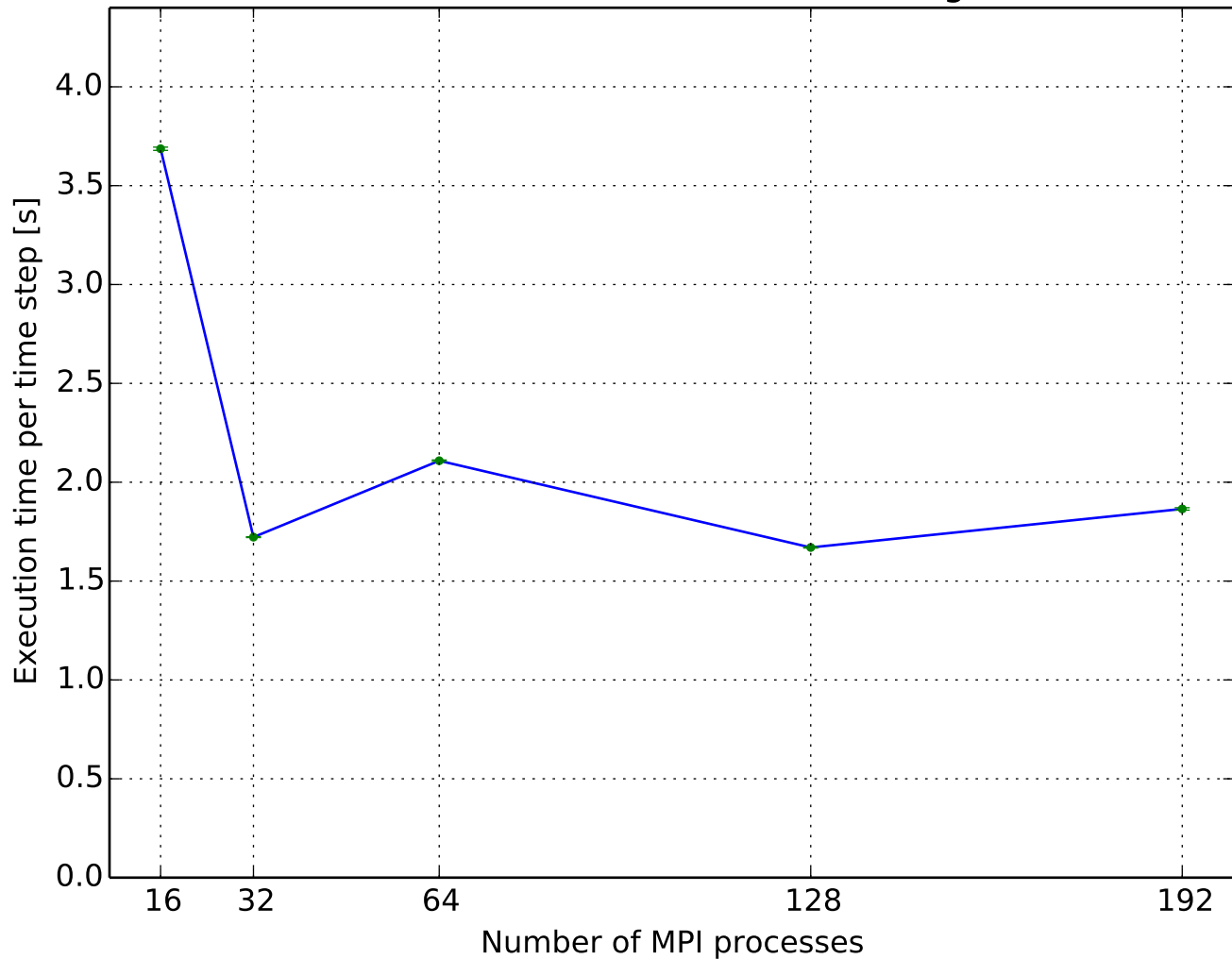
Speedup ratio
(0.74292M cells, laminar ,GAMG-GaussSeidel)



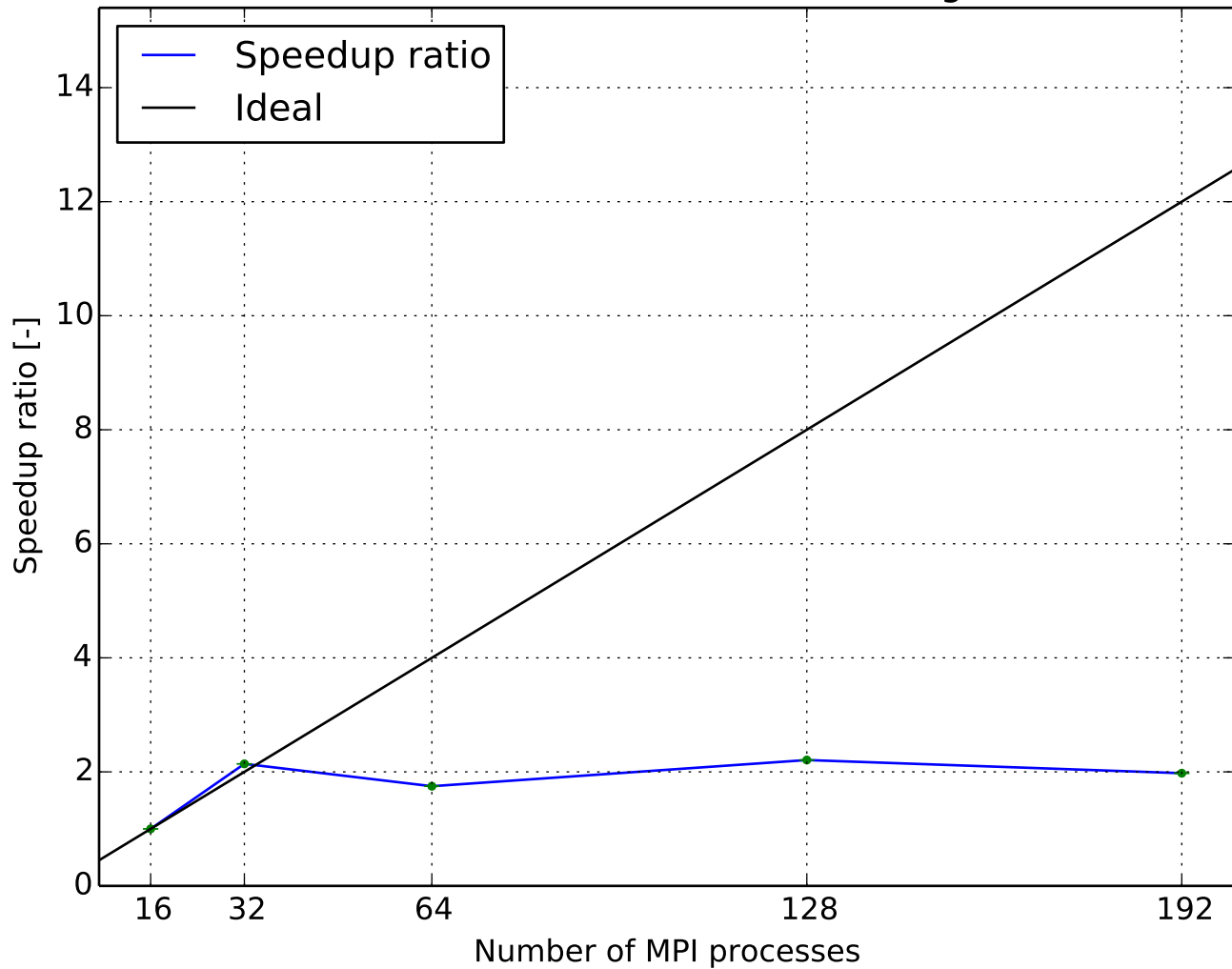
Parallel efficiency
(0.74292M cells, laminar ,GAMG-GaussSeidel)



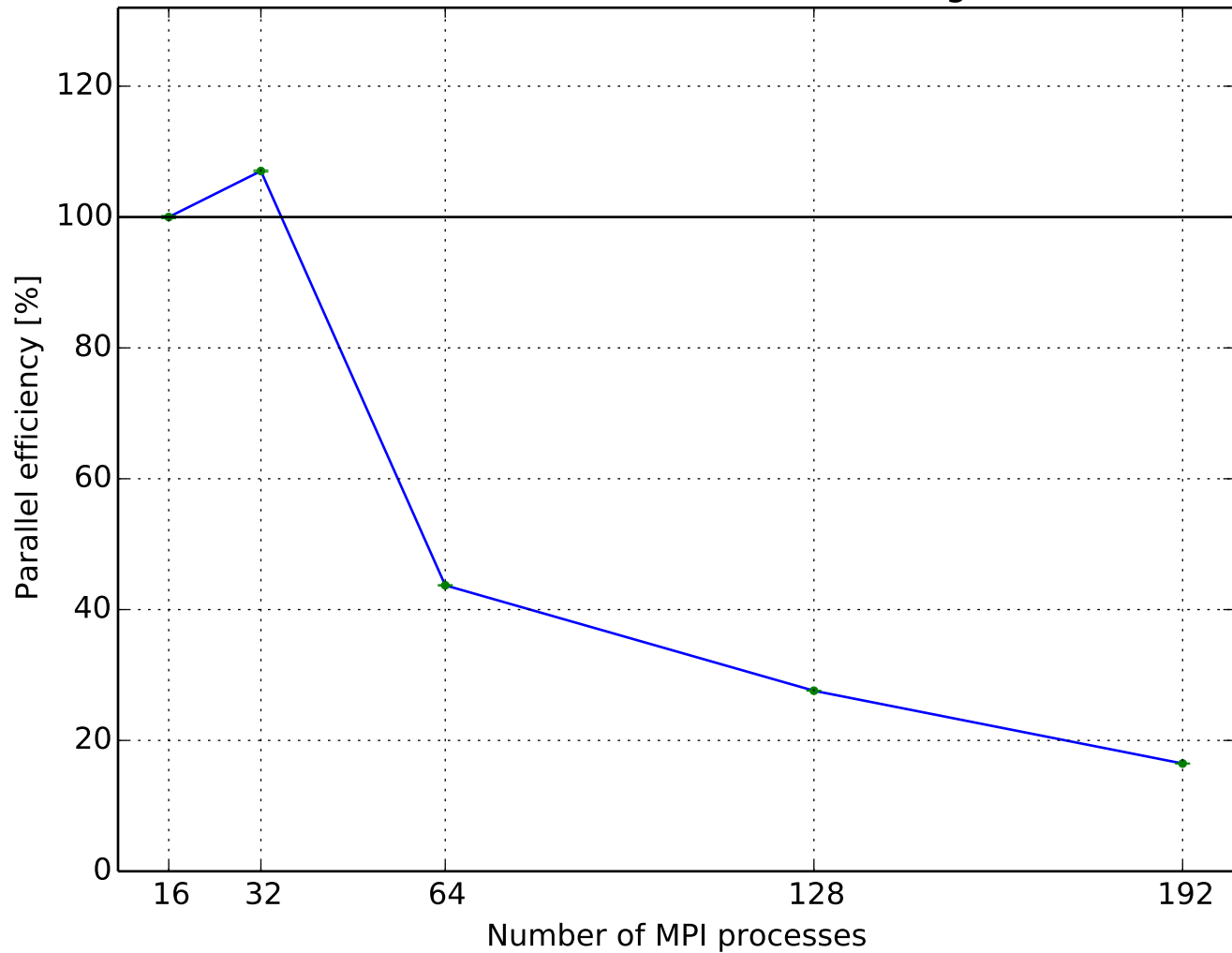
Execution time per time step
(0.74292M cells, laminar ,GAMG-nonBlockingGaussSeidel)



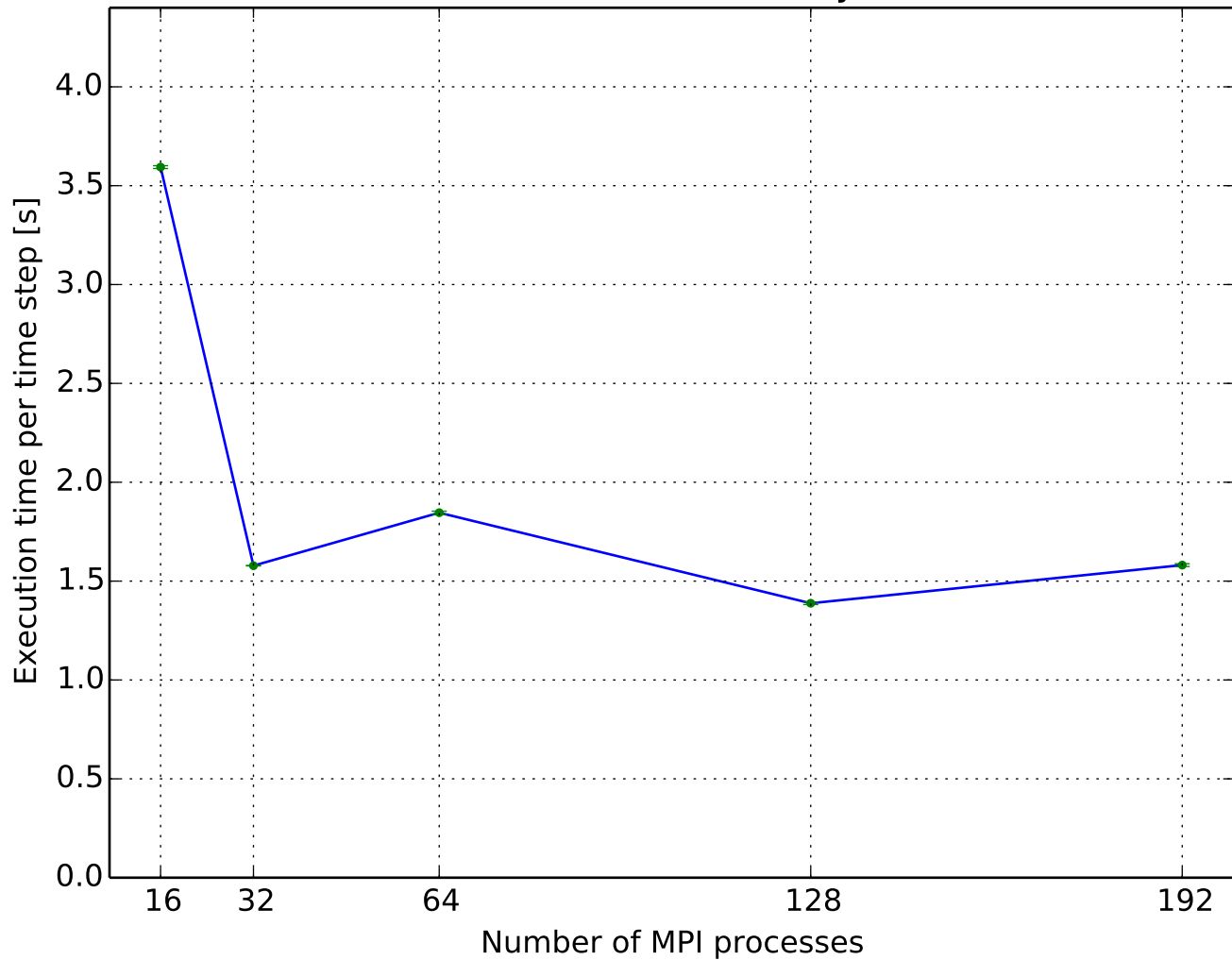
Speedup ratio
(0.74292M cells, laminar ,GAMG-nonBlockingGaussSeidel)



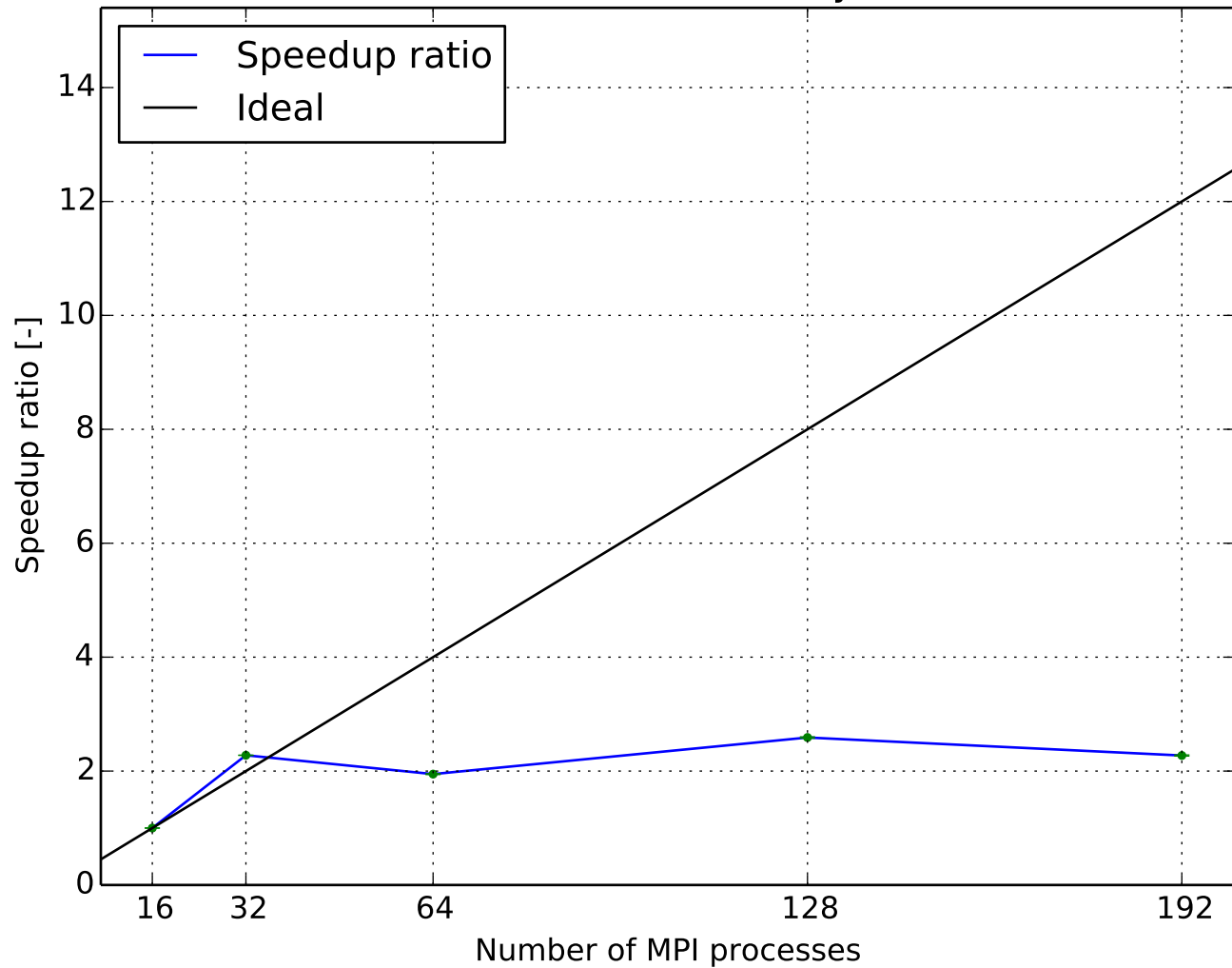
Parallel efficiency
(0.74292M cells, laminar ,GAMG-nonBlockingGaussSeidel)



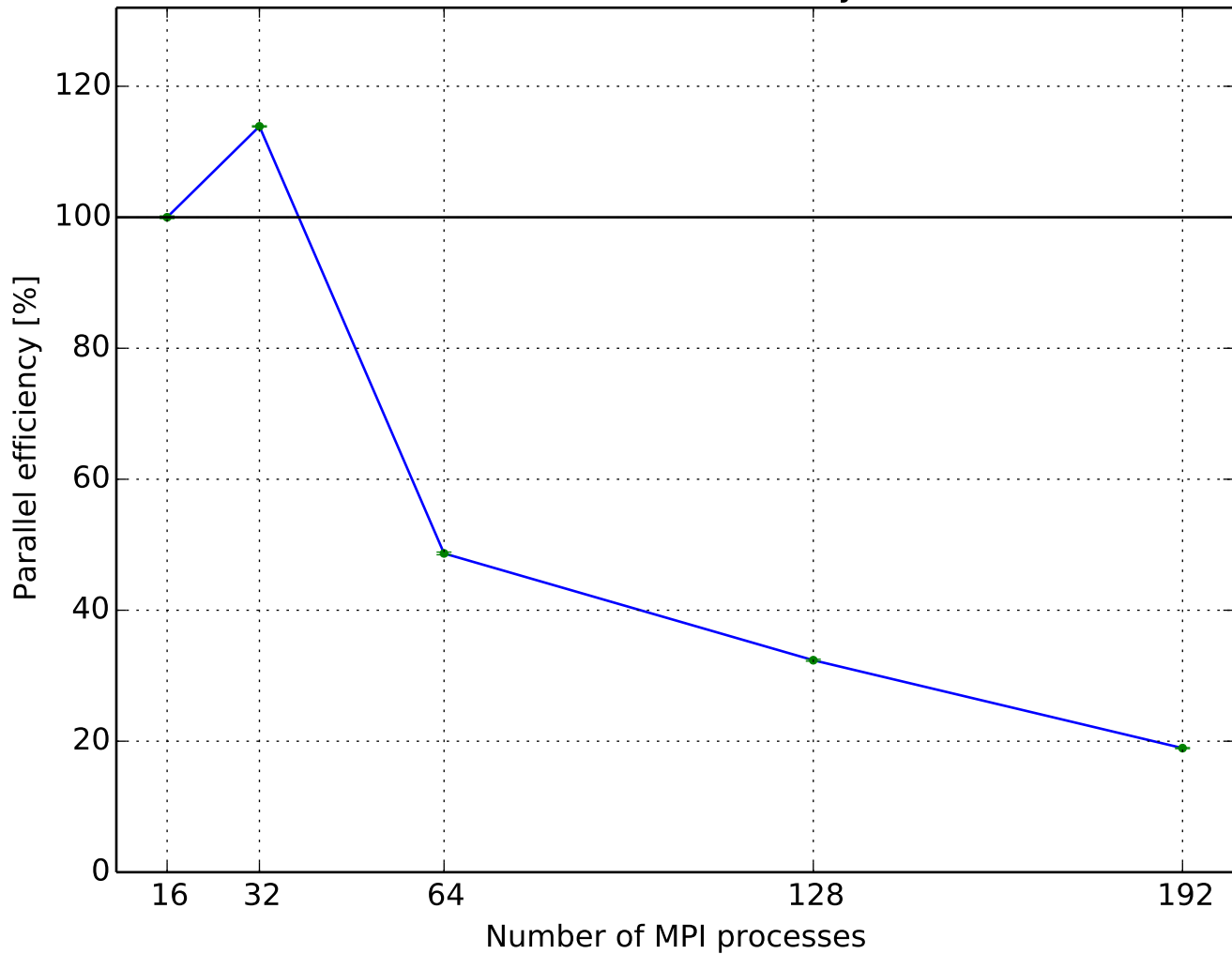
Execution time per time step
(0.74292M cells, laminar ,GAMG-symGaussSeidel)



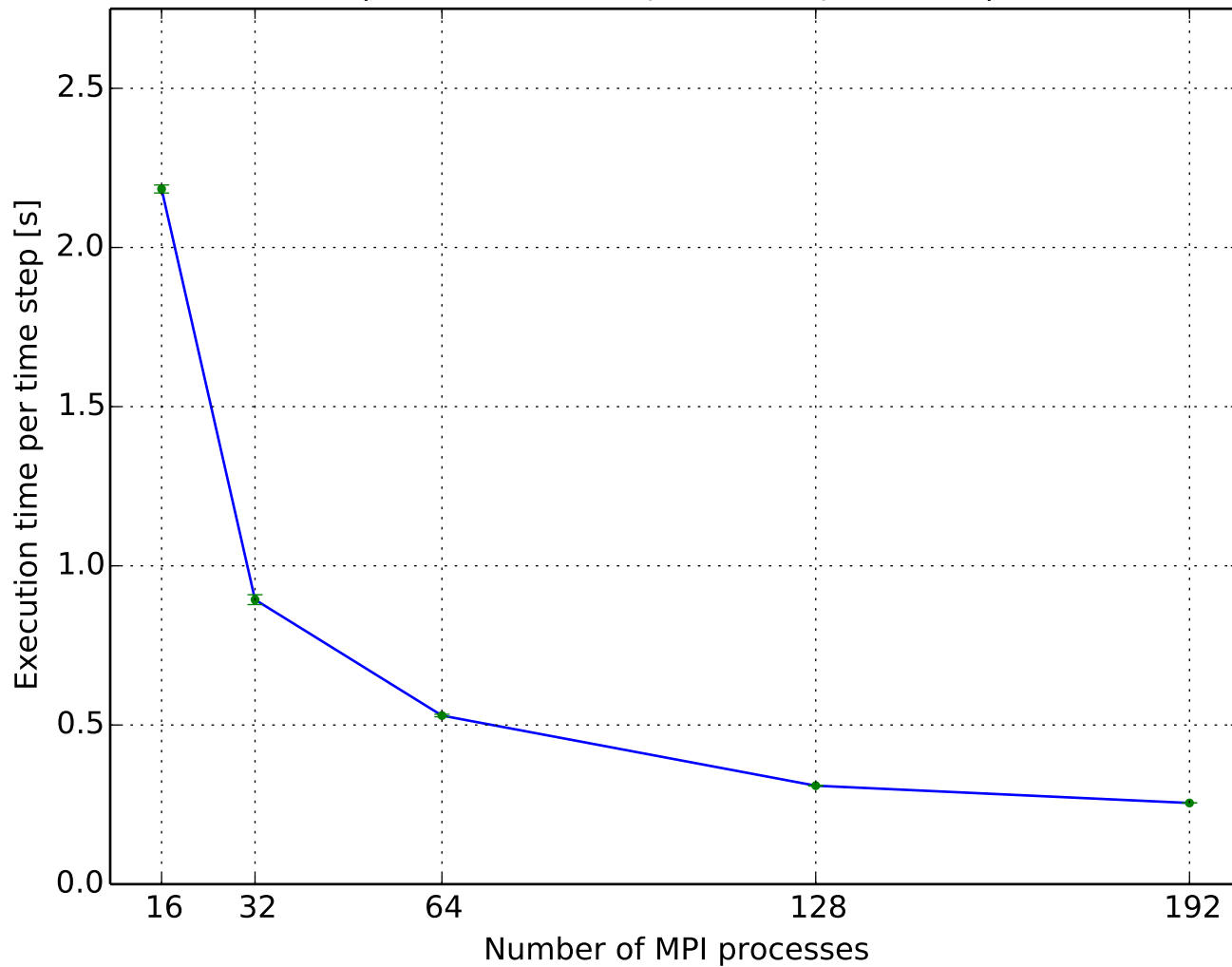
Speedup ratio
(0.74292M cells, laminar ,GAMG-symGaussSeidel)



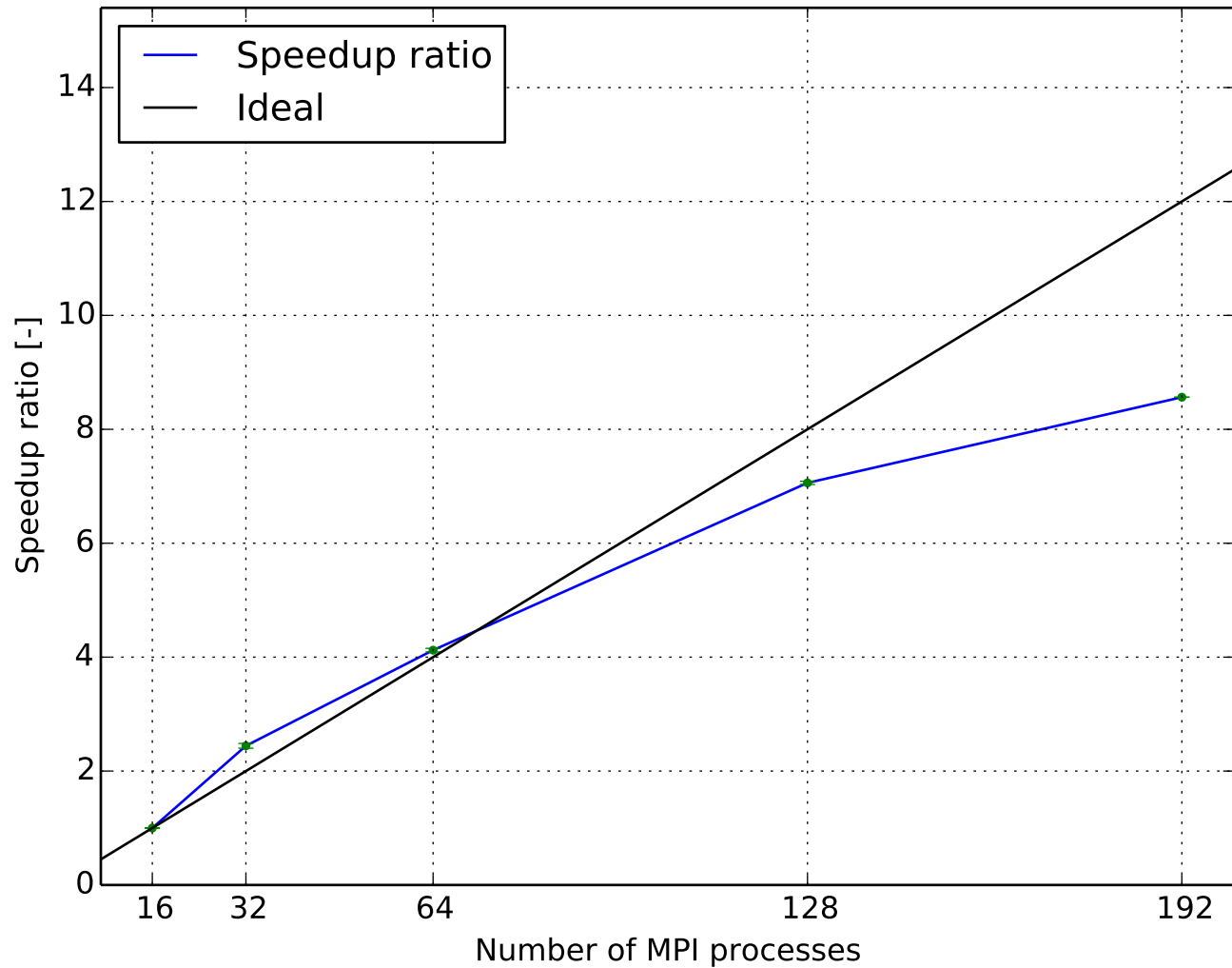
Parallel efficiency
(0.74292M cells, laminar ,GAMG-symGaussSeidel)



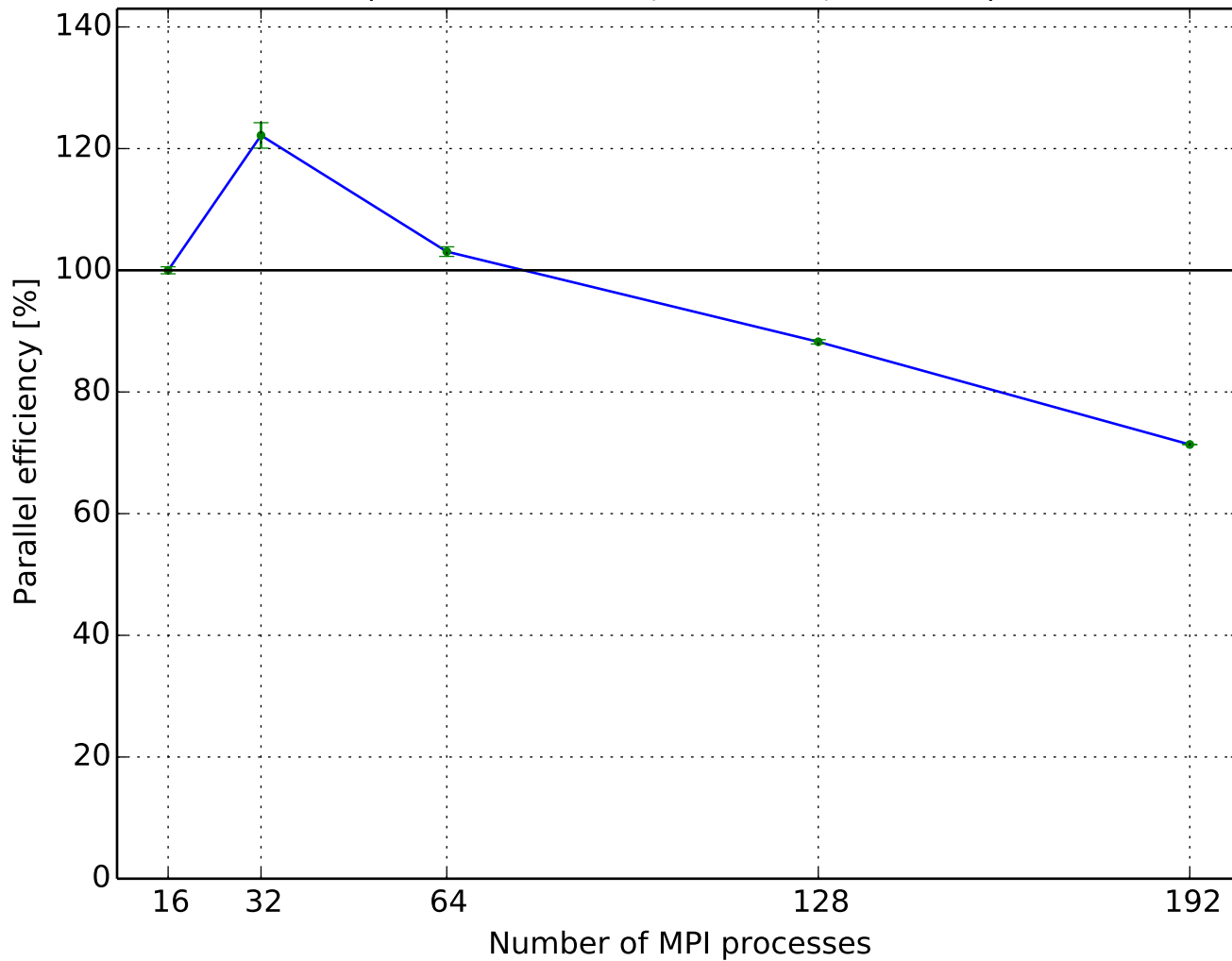
Execution time per time step
(0.74292M cells, laminar ,PCG-DIC)



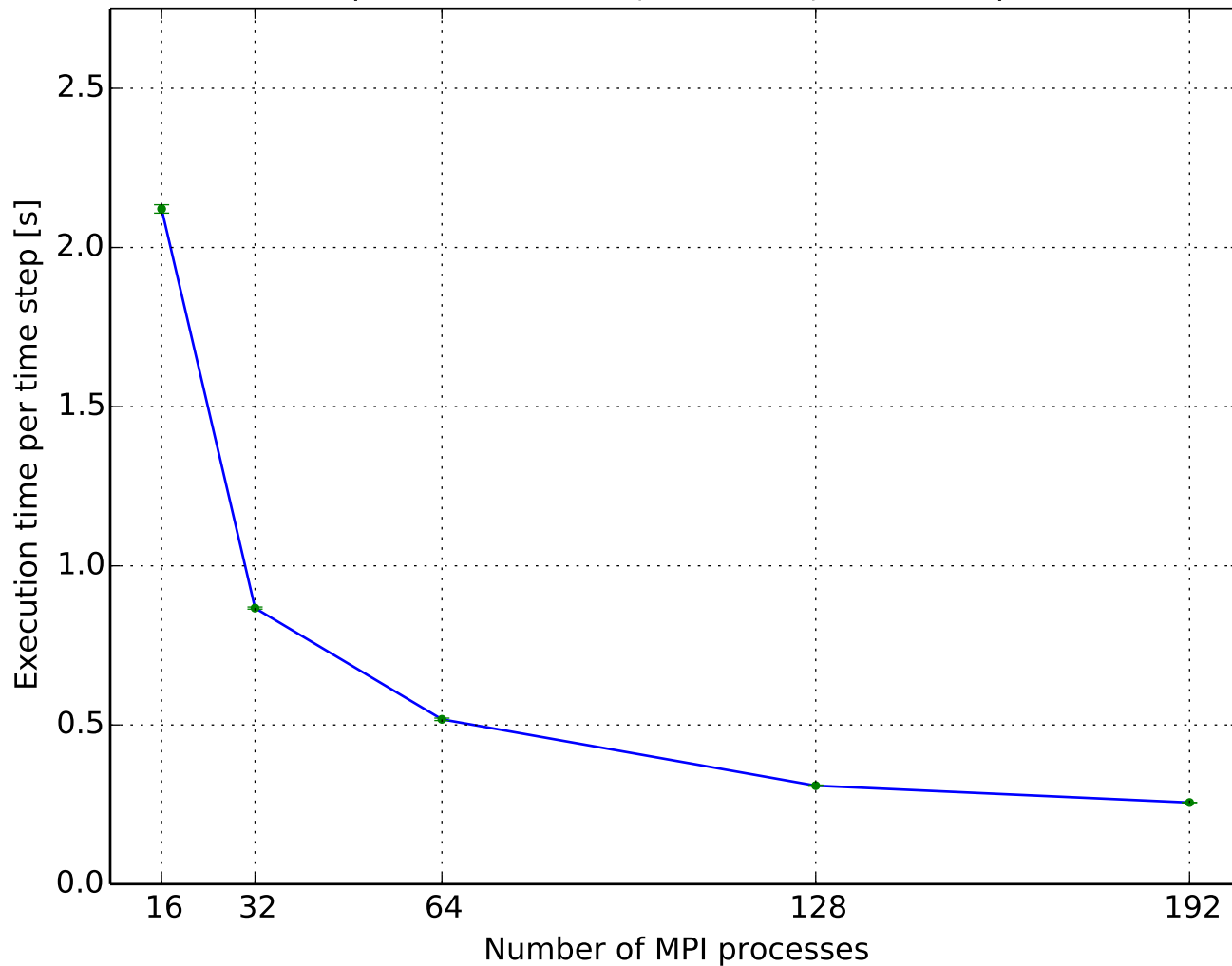
Speedup ratio
(0.74292M cells, laminar ,PCG-DIC)



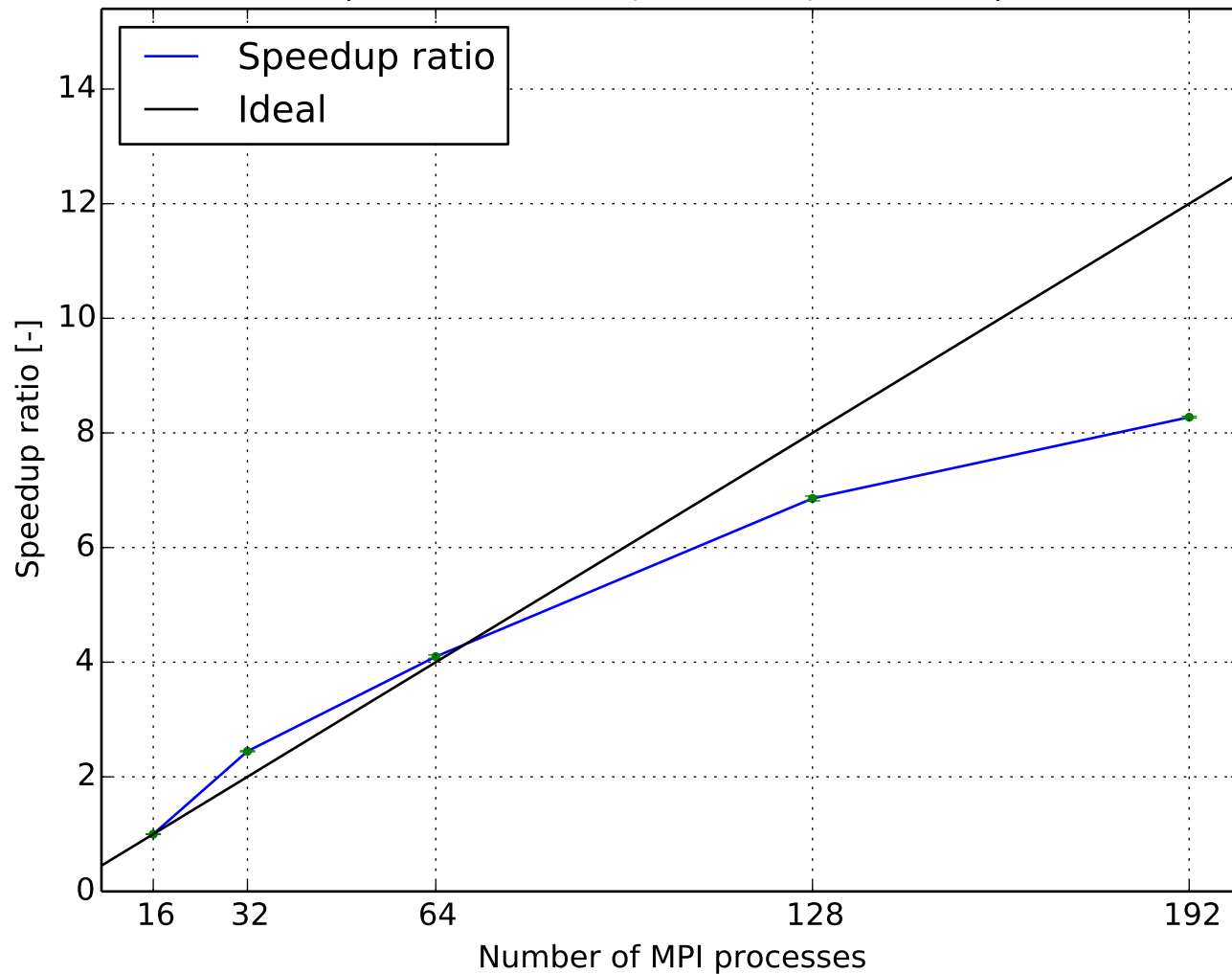
Parallel efficiency
(0.74292M cells, laminar ,PCG-DIC)



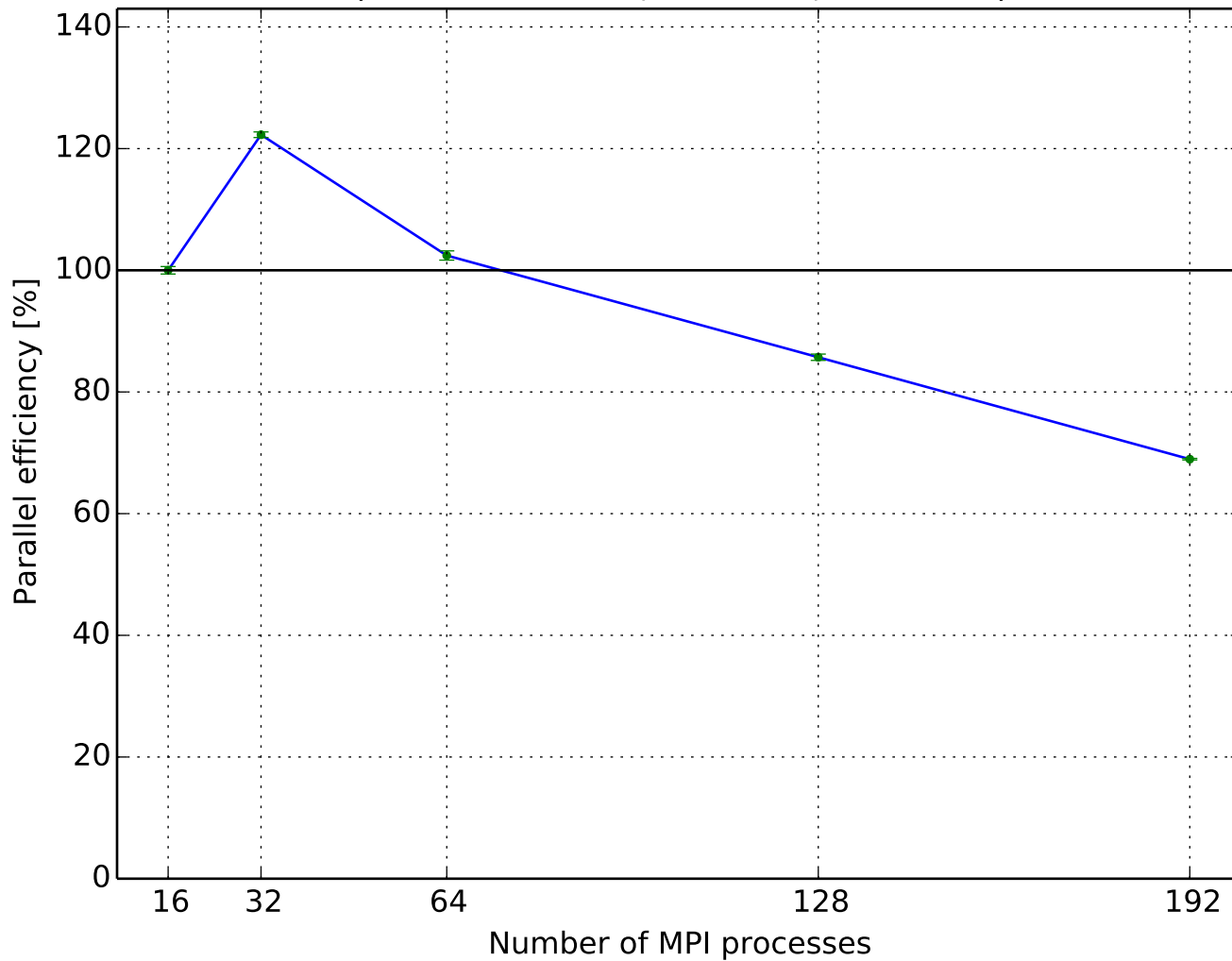
Execution time per time step
(0.74292M cells, laminar ,PCG-FDIC)



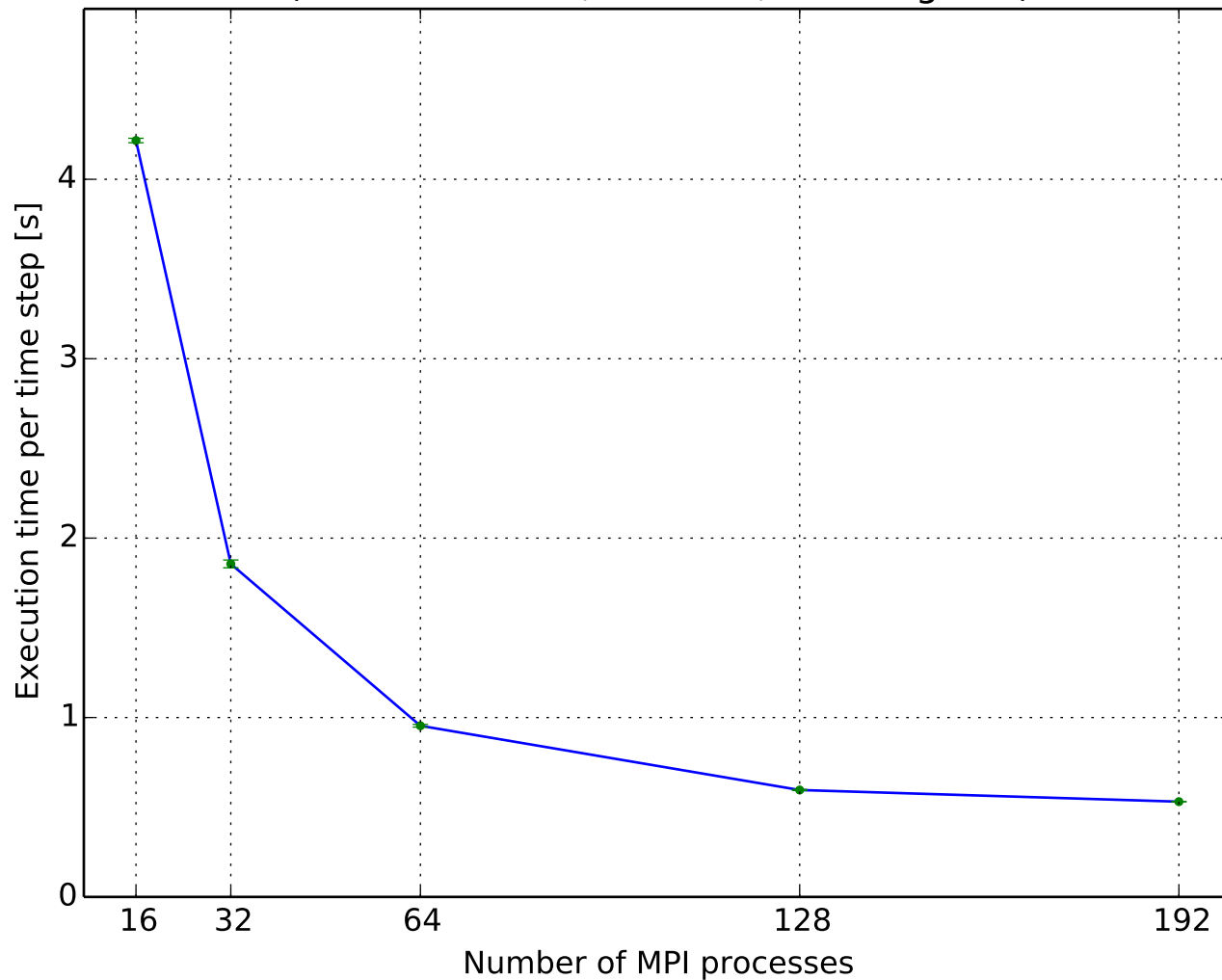
Speedup ratio
(0.74292M cells, laminar ,PCG-FDIC)



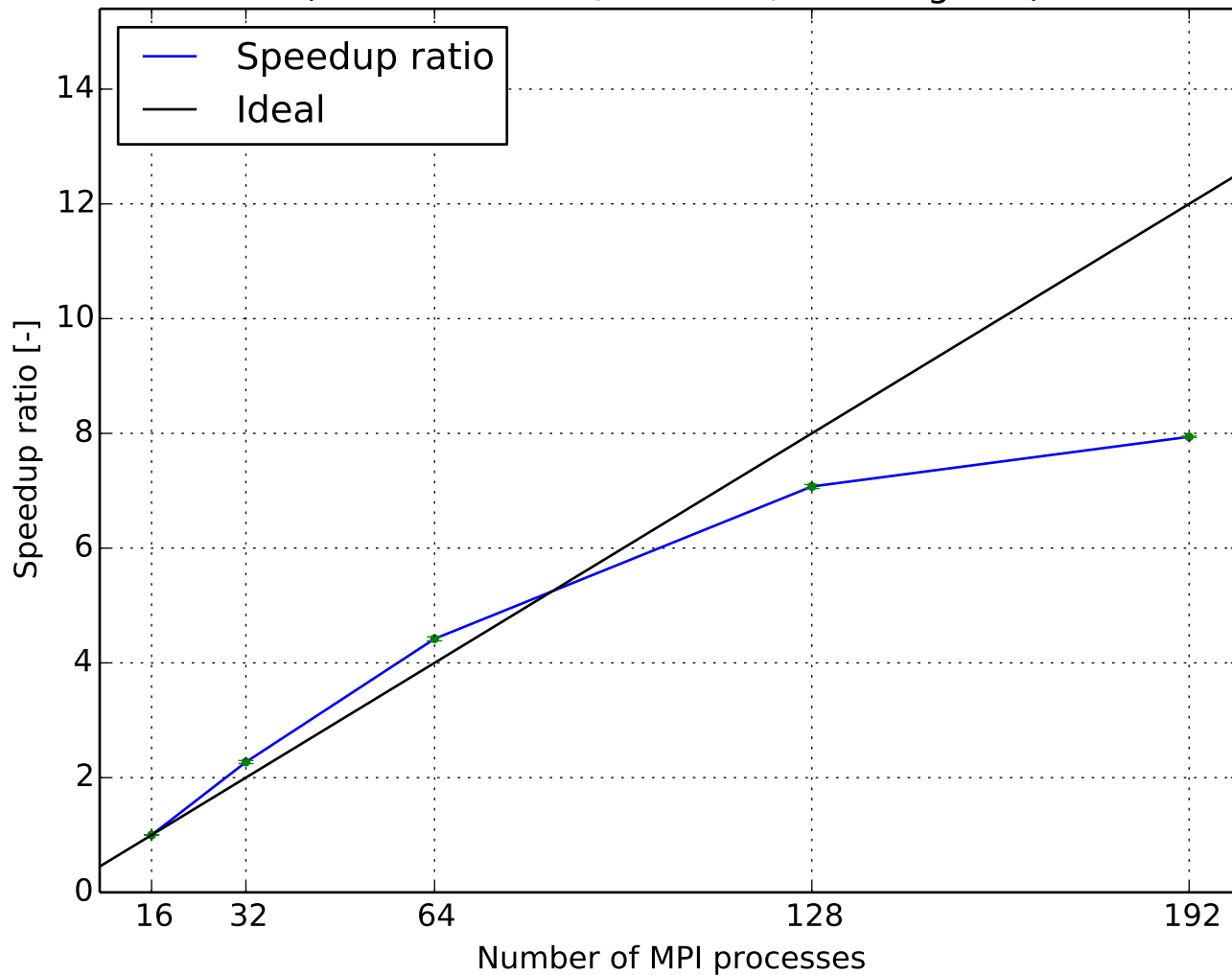
Parallel efficiency
(0.74292M cells, laminar ,PCG-FDIC)



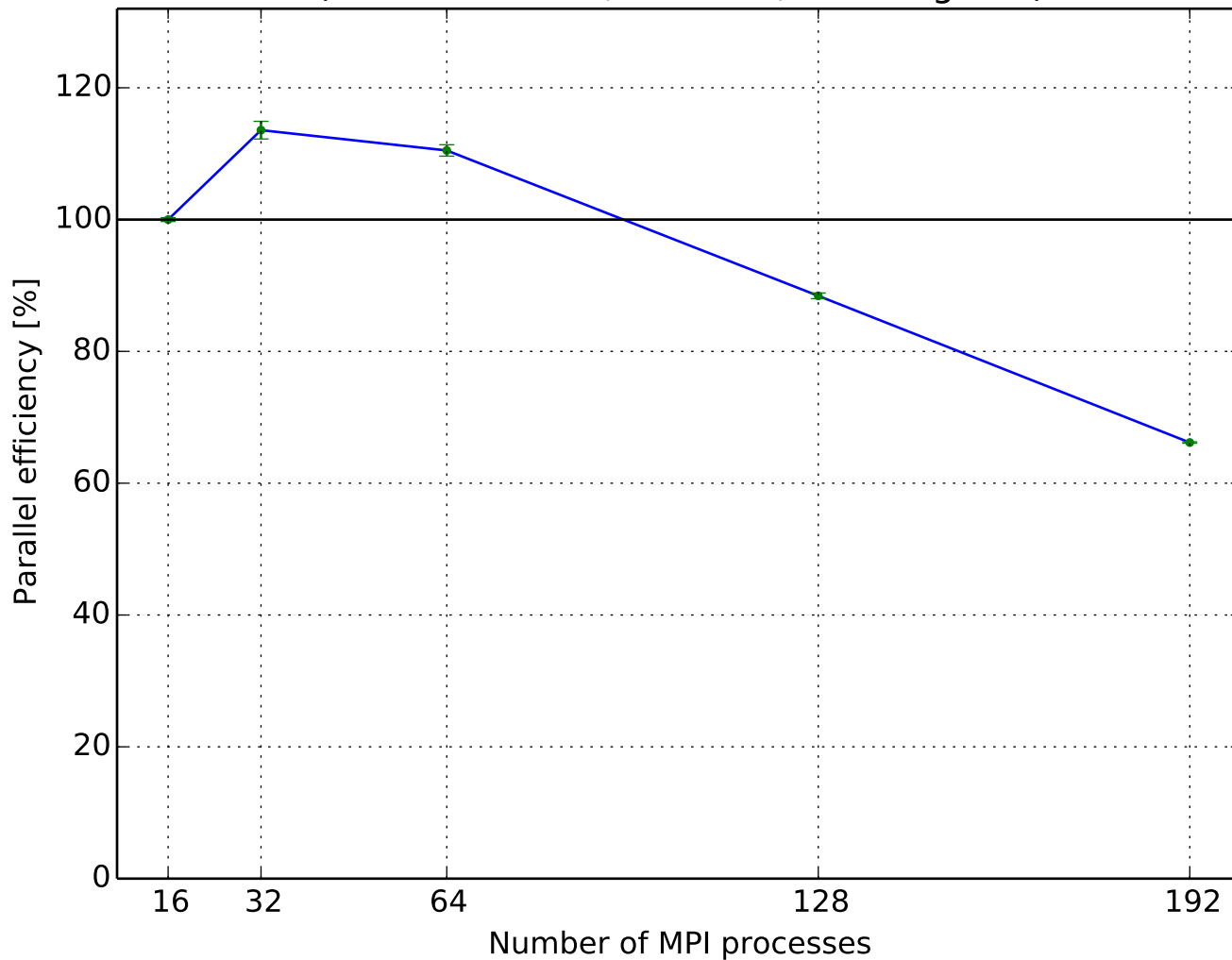
Execution time per time step
(0.74292M cells, laminar ,PCG-diagonal)



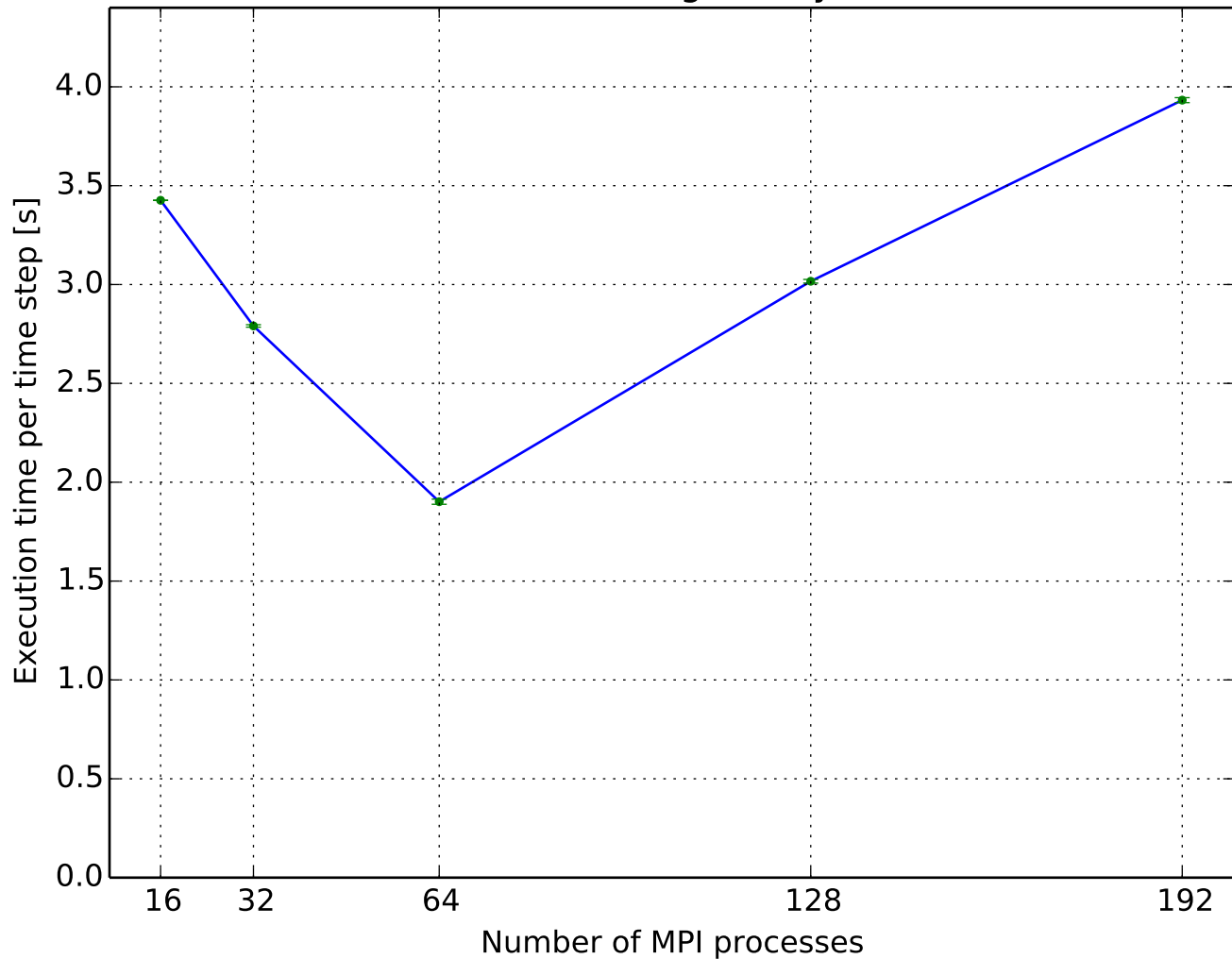
Speedup ratio
(0.74292M cells, laminar ,PCG-diagonal)



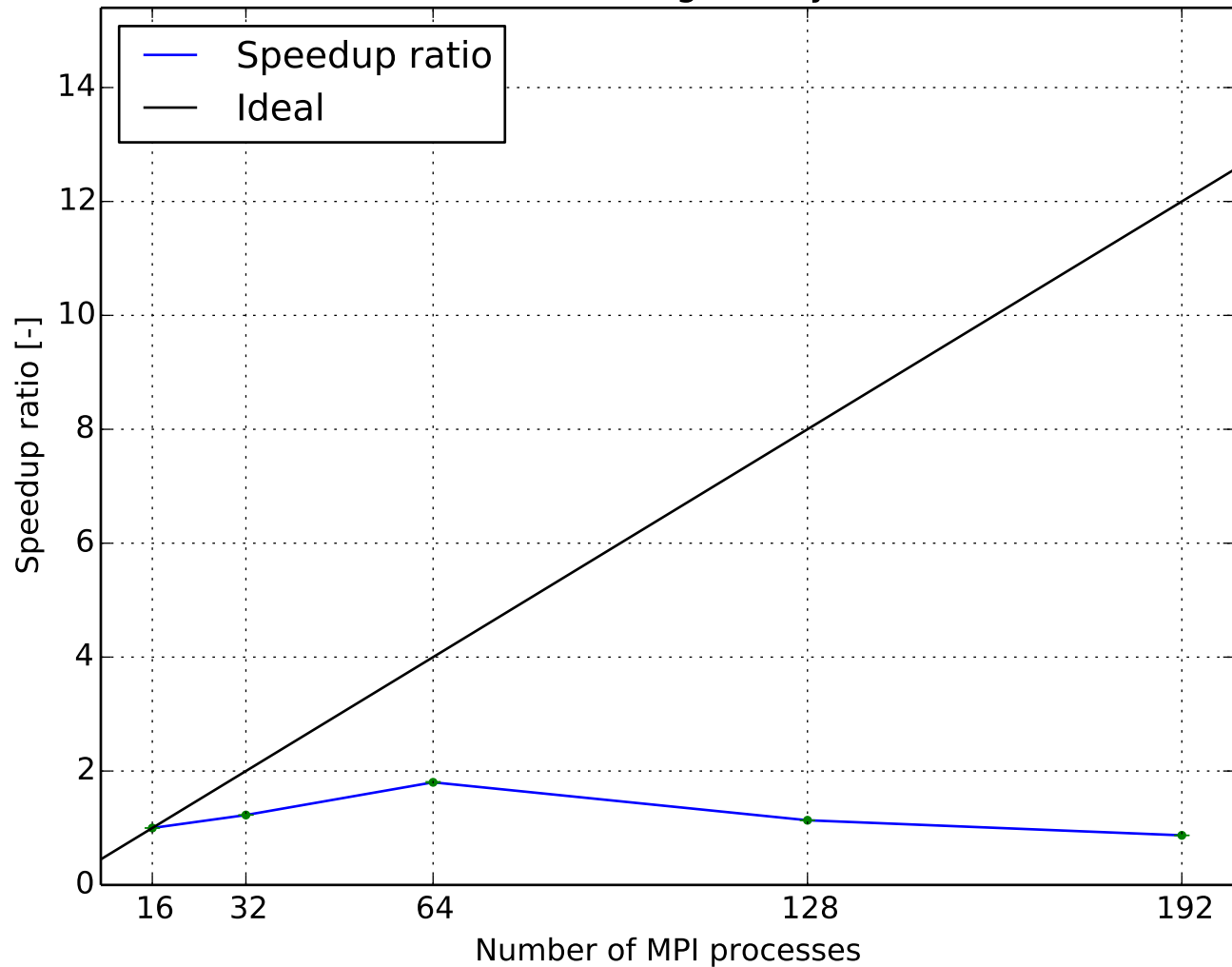
Parallel efficiency
(0.74292M cells, laminar ,PCG-diagonal)



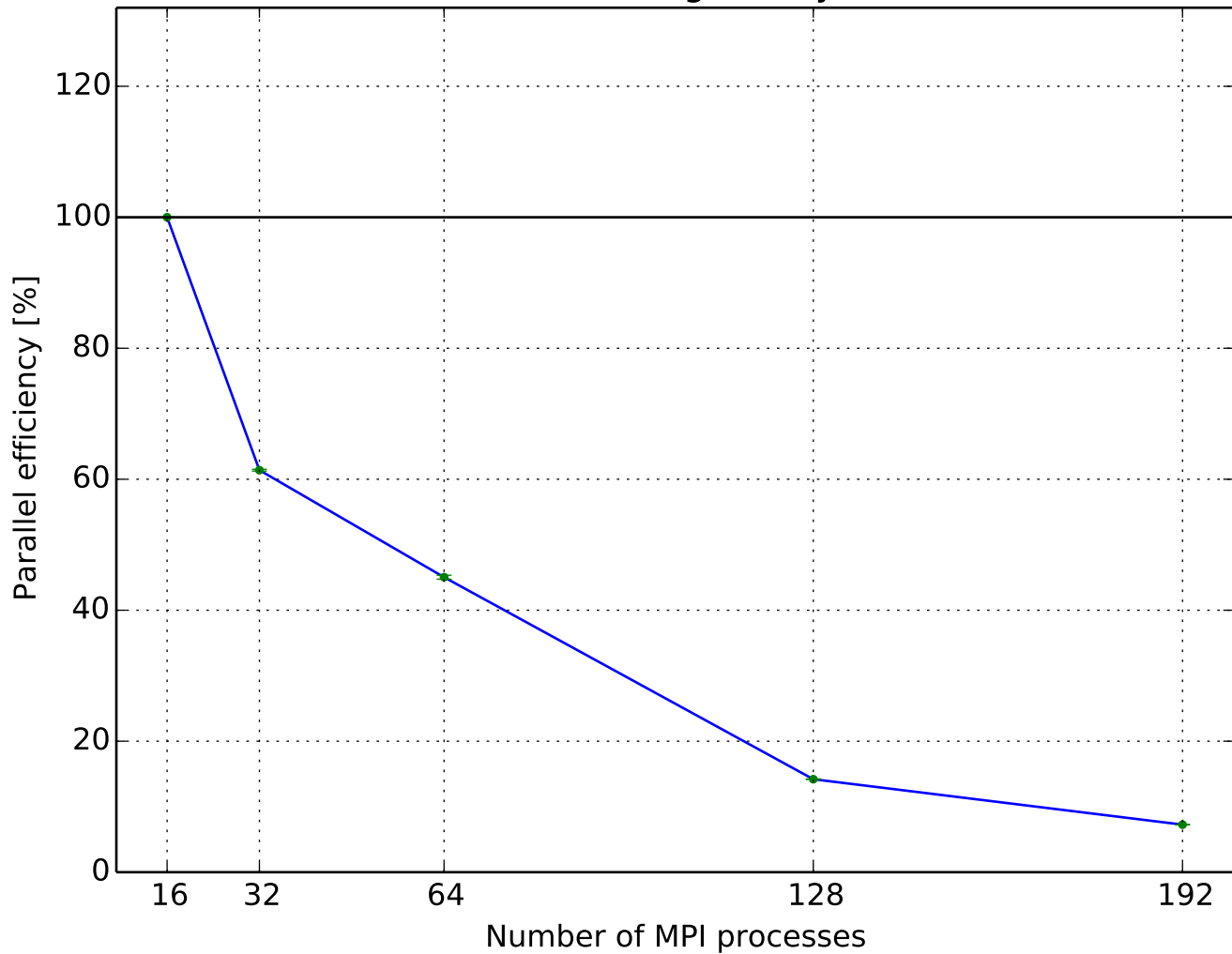
Execution time per time step
(1.48732M cells, Smagorinsky ,GAMG-DIC)



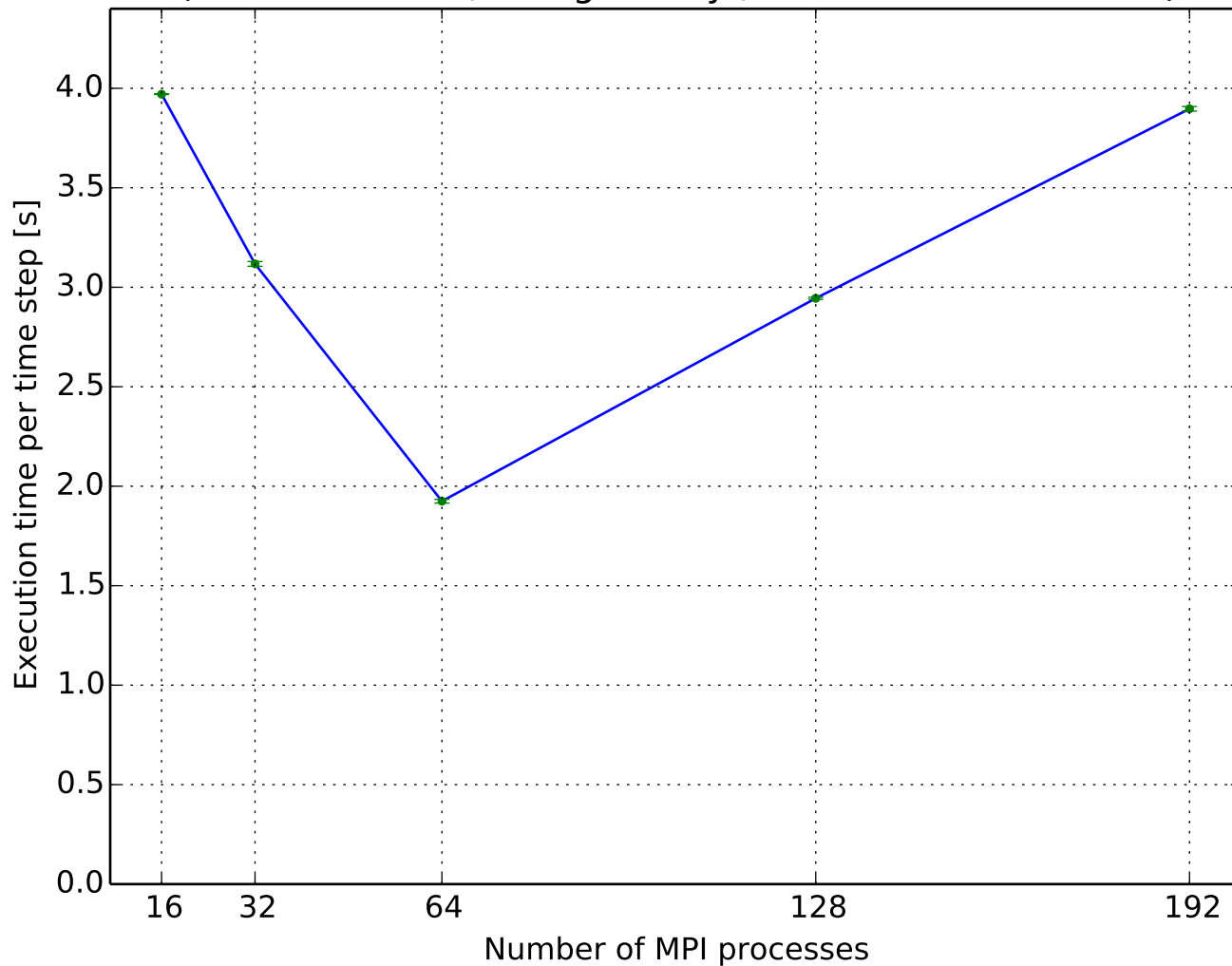
Speedup ratio
(1.48732M cells, Smagorinsky ,GAMG-DIC)



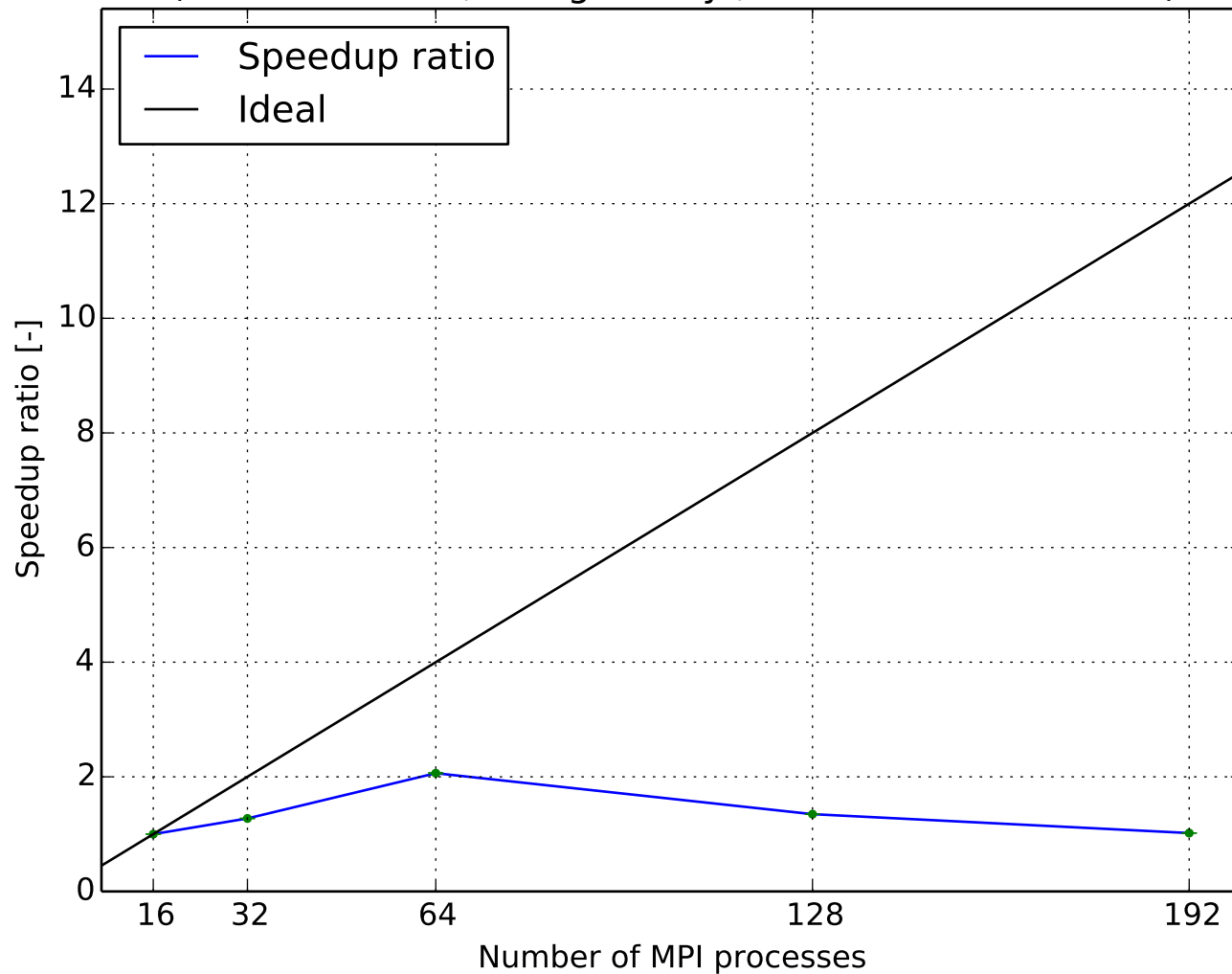
Parallel efficiency
(1.48732M cells, Smagorinsky ,GAMG-DIC)



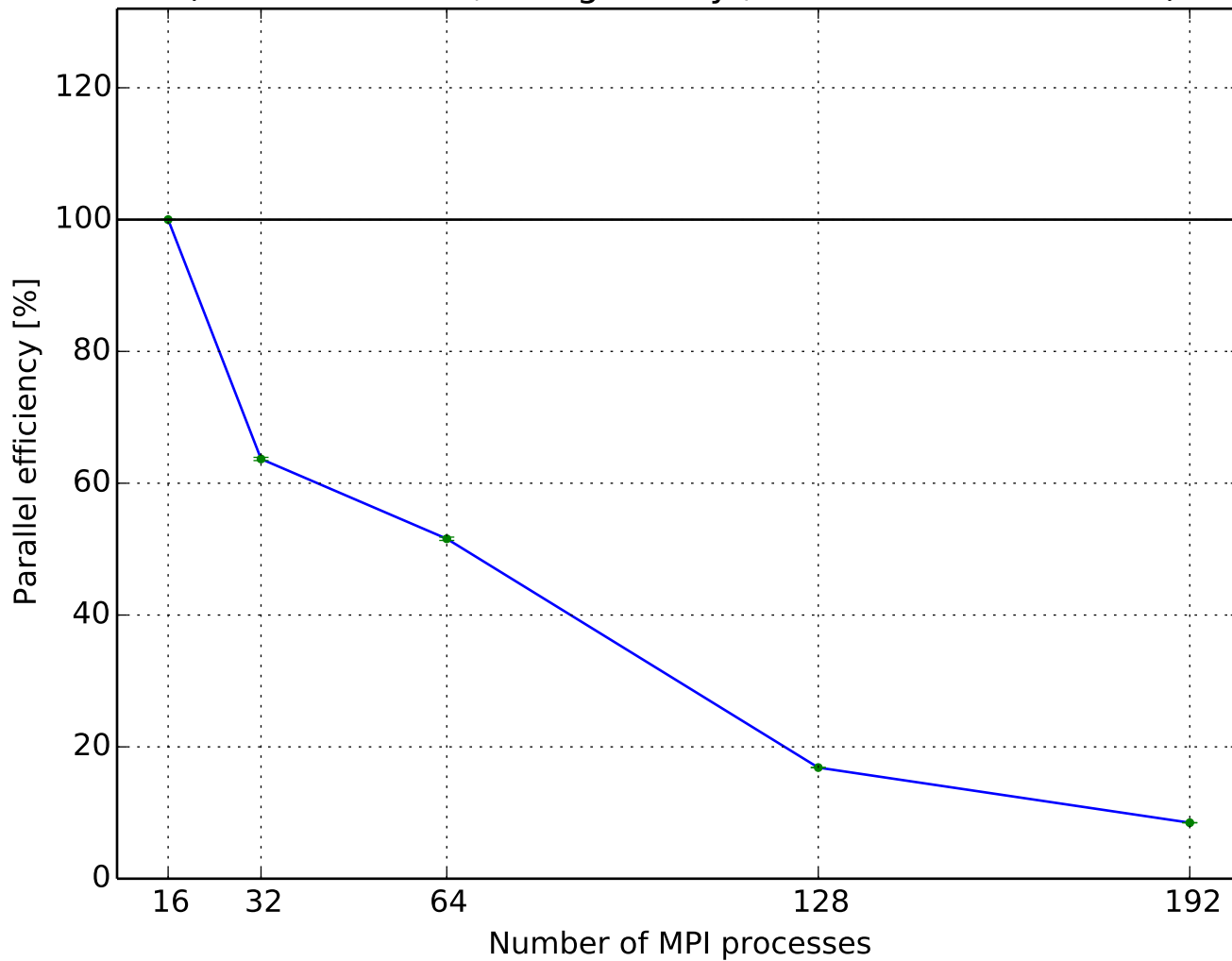
Execution time per time step
(1.48732M cells, Smagorinsky ,GAMG-DICGaussSeidel)



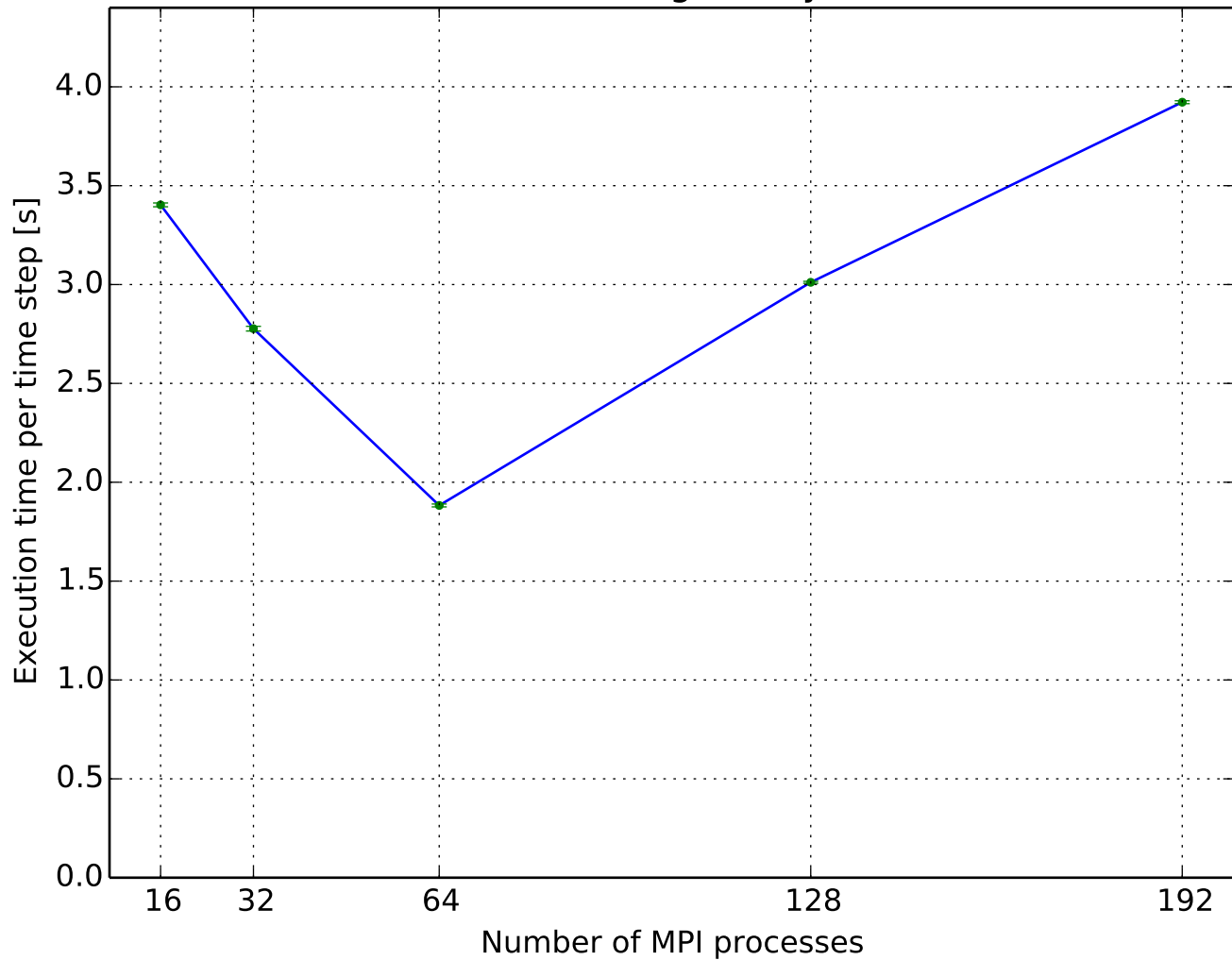
Speedup ratio
(1.48732M cells, Smagorinsky ,GAMG-DICGaussSeidel)



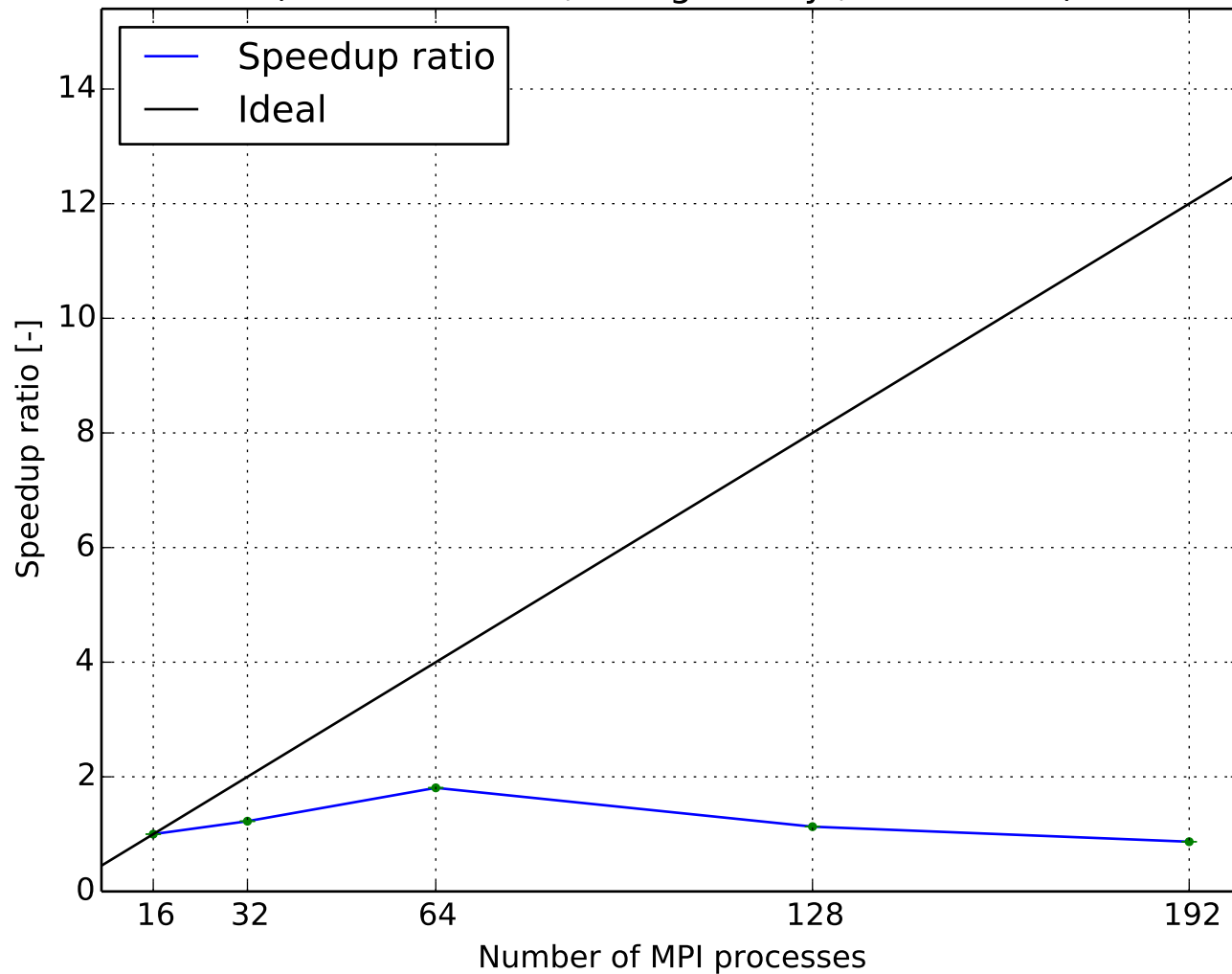
Parallel efficiency
(1.48732M cells, Smagorinsky ,GAMG-DICGaussSeidel)



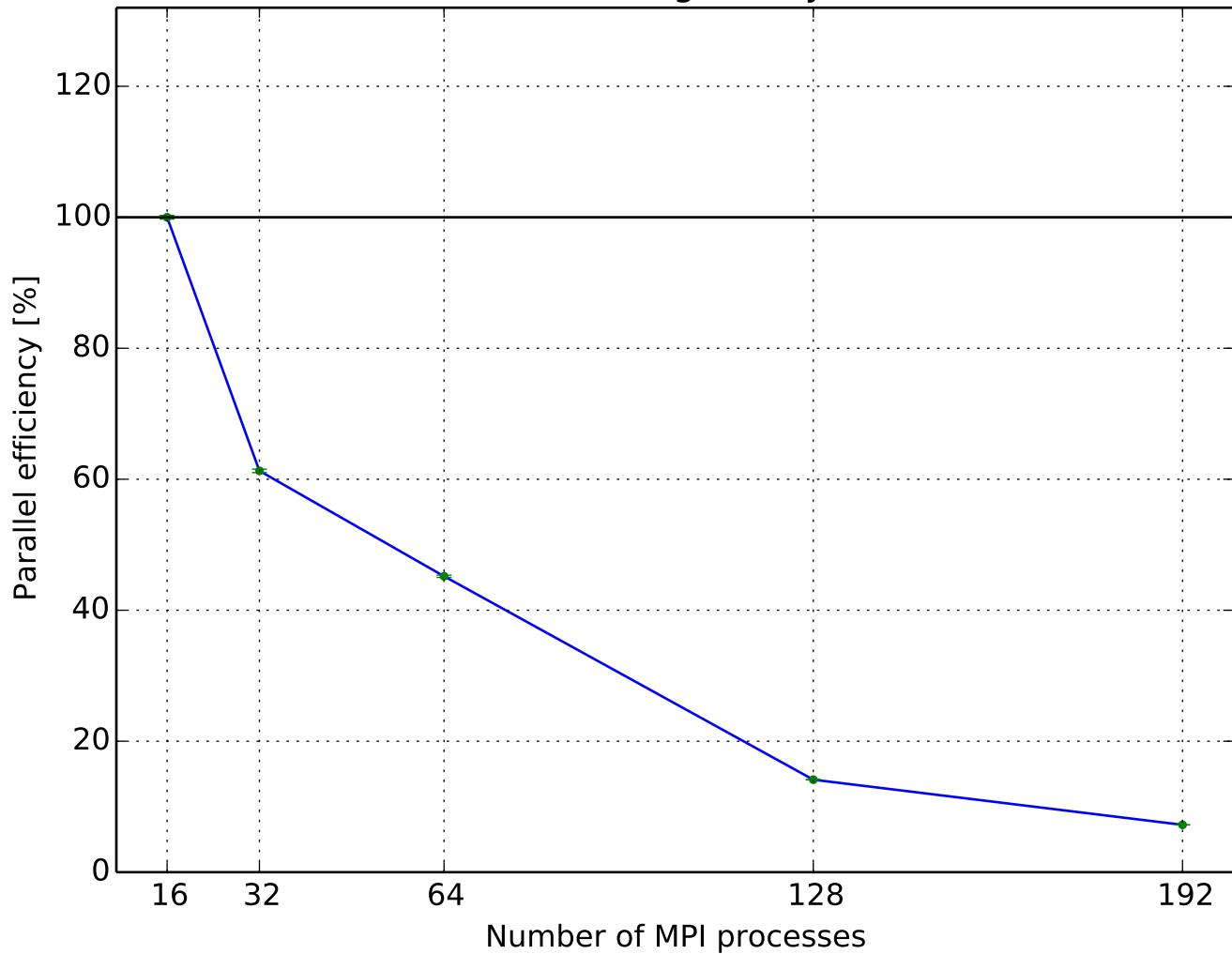
Execution time per time step
(1.48732M cells, Smagorinsky ,GAMG-FDIC)



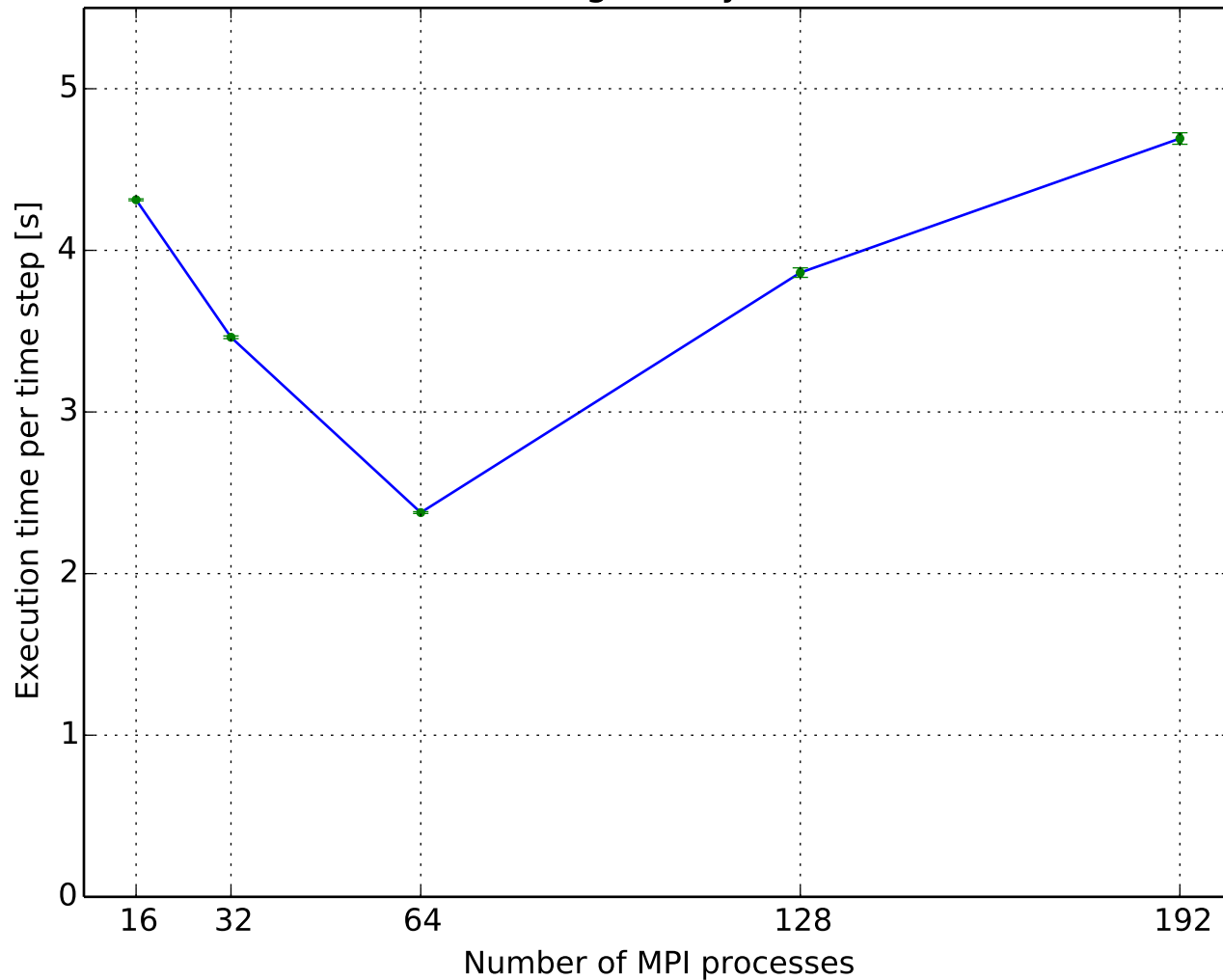
Speedup ratio
(1.48732M cells, Smagorinsky ,GAMG-FDIC)



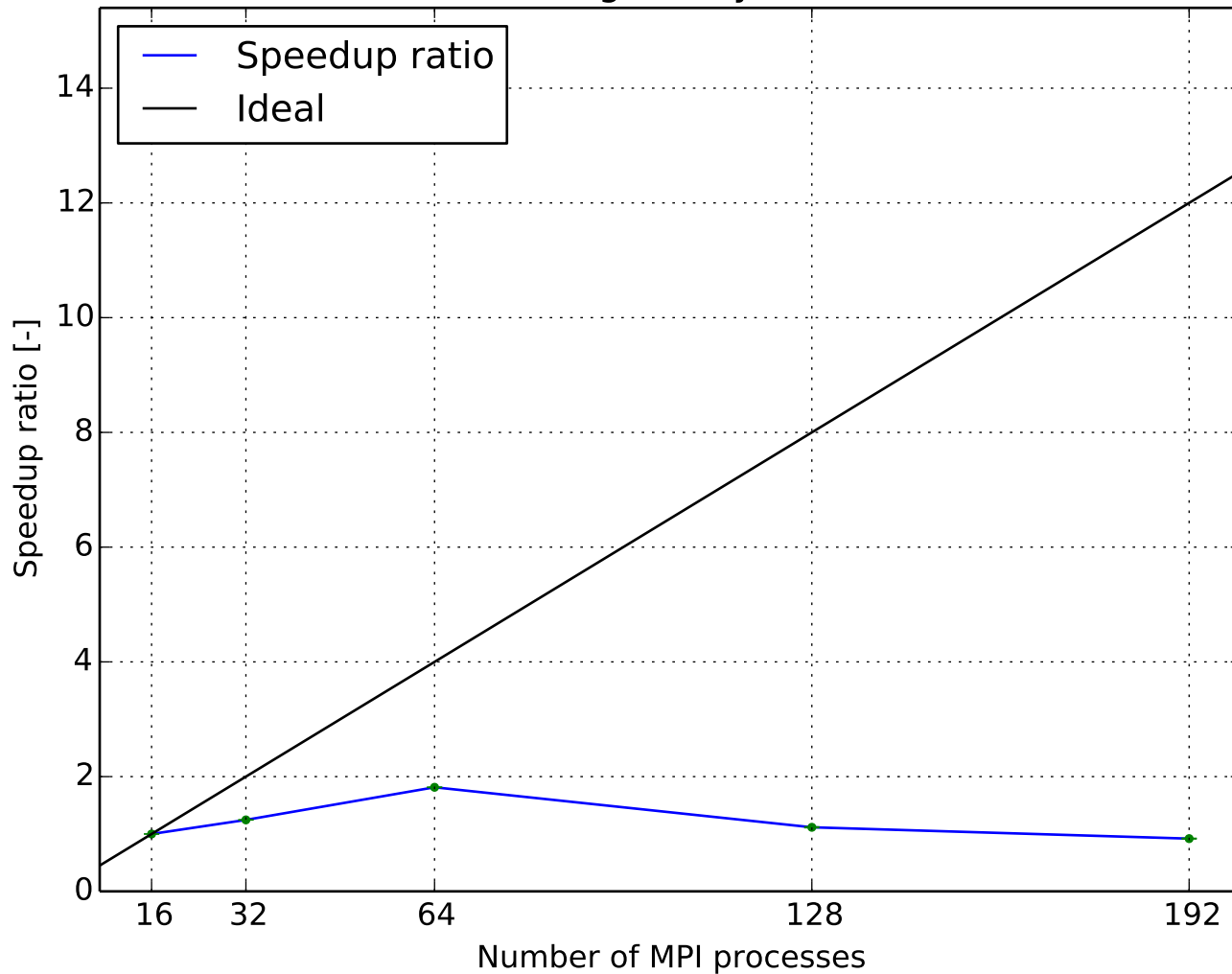
Parallel efficiency
(1.48732M cells, Smagorinsky ,GAMG-FDIC)



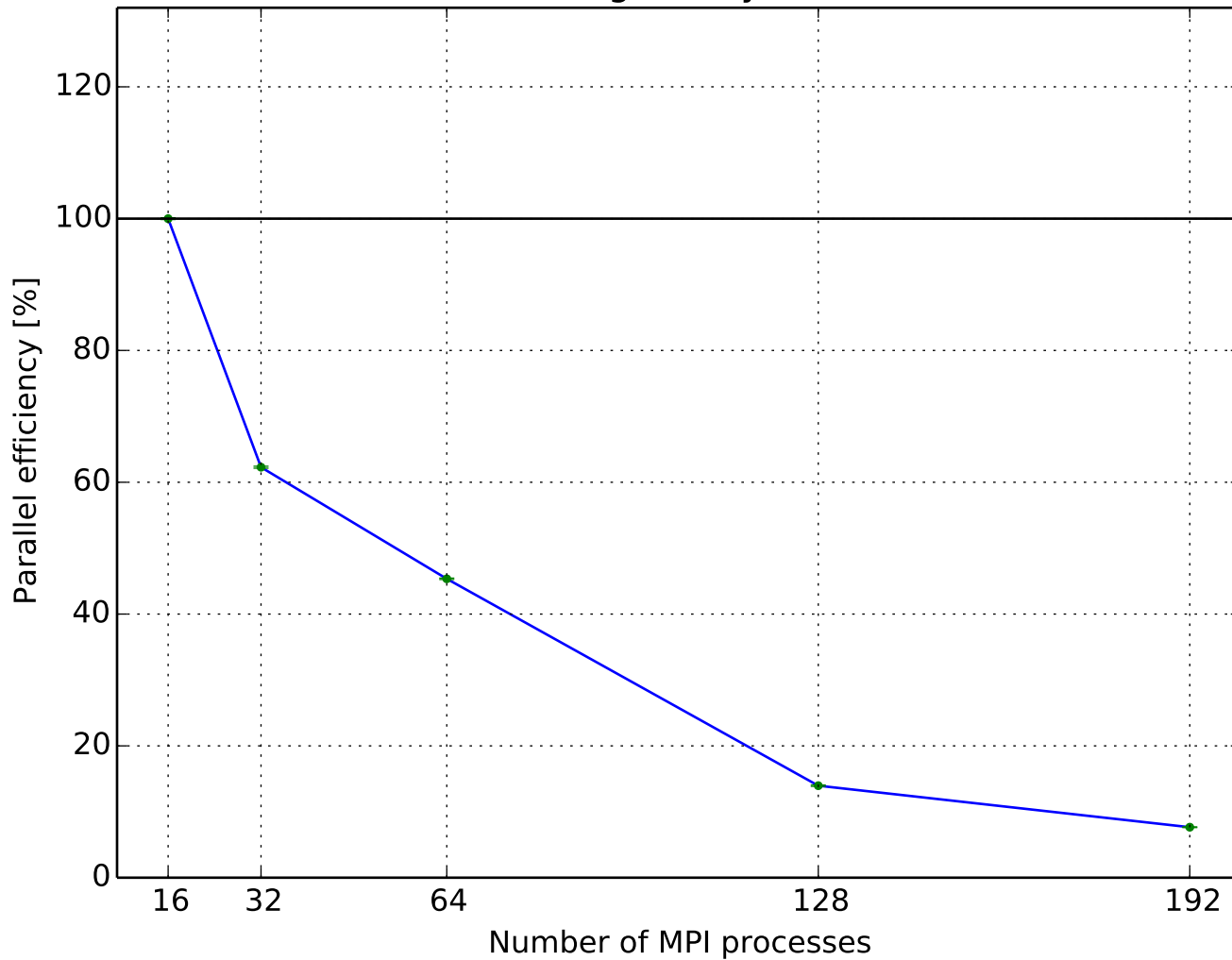
Execution time per time step
(1.48732M cells, Smagorinsky ,GAMG-GaussSeidel)



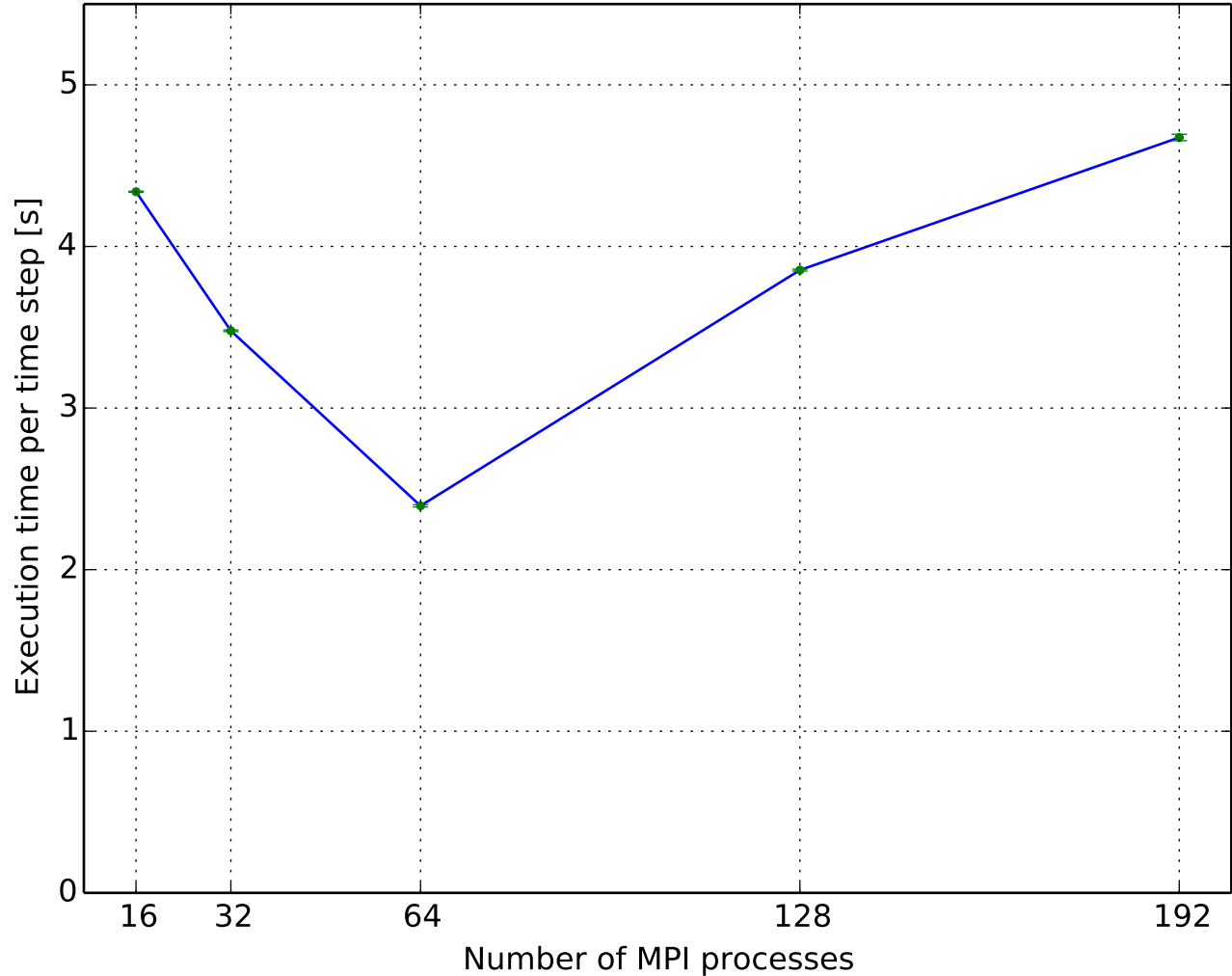
Speedup ratio
(1.48732M cells, Smagorinsky ,GAMG-GaussSeidel)



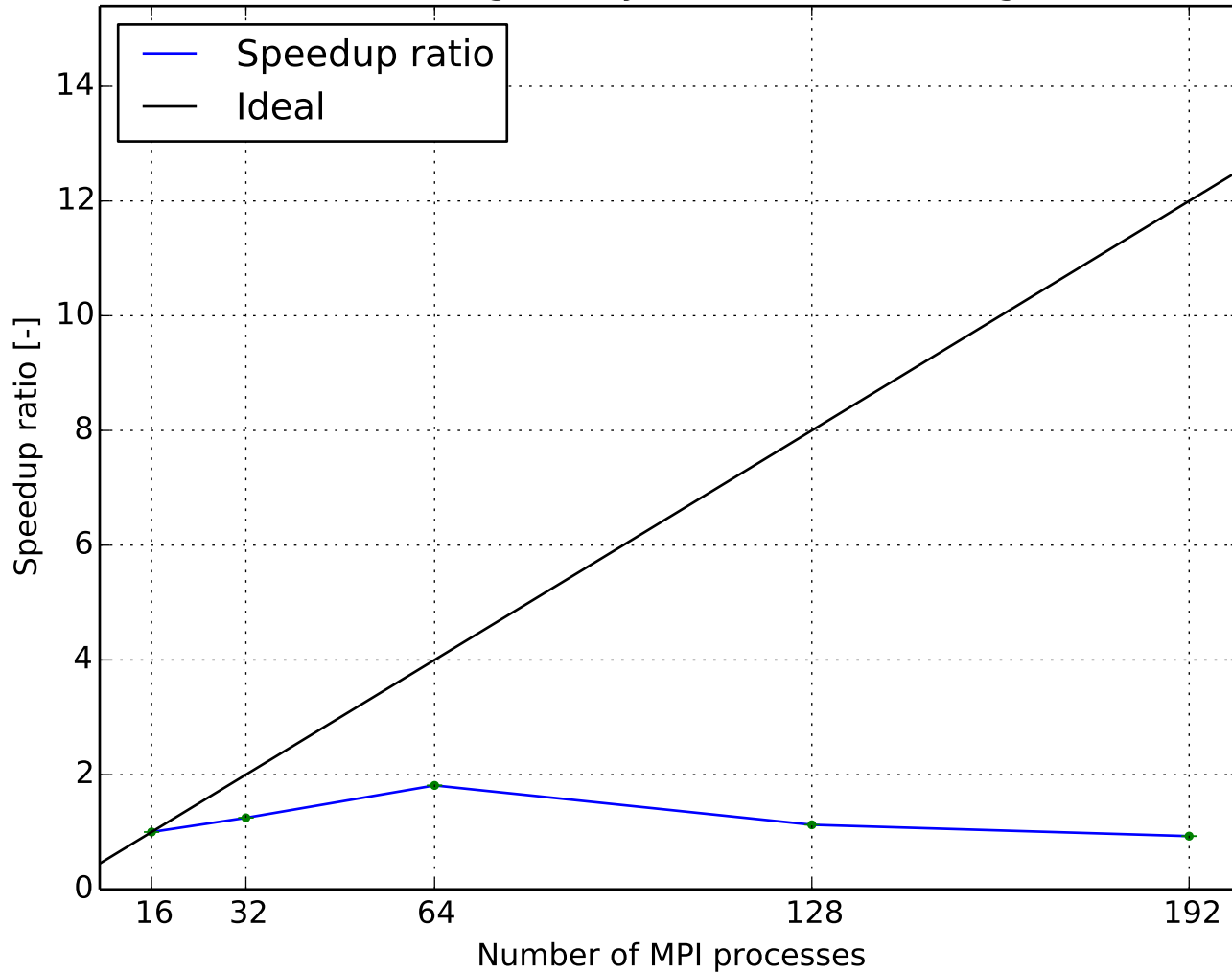
Parallel efficiency
(1.48732M cells, Smagorinsky ,GAMG-GaussSeidel)



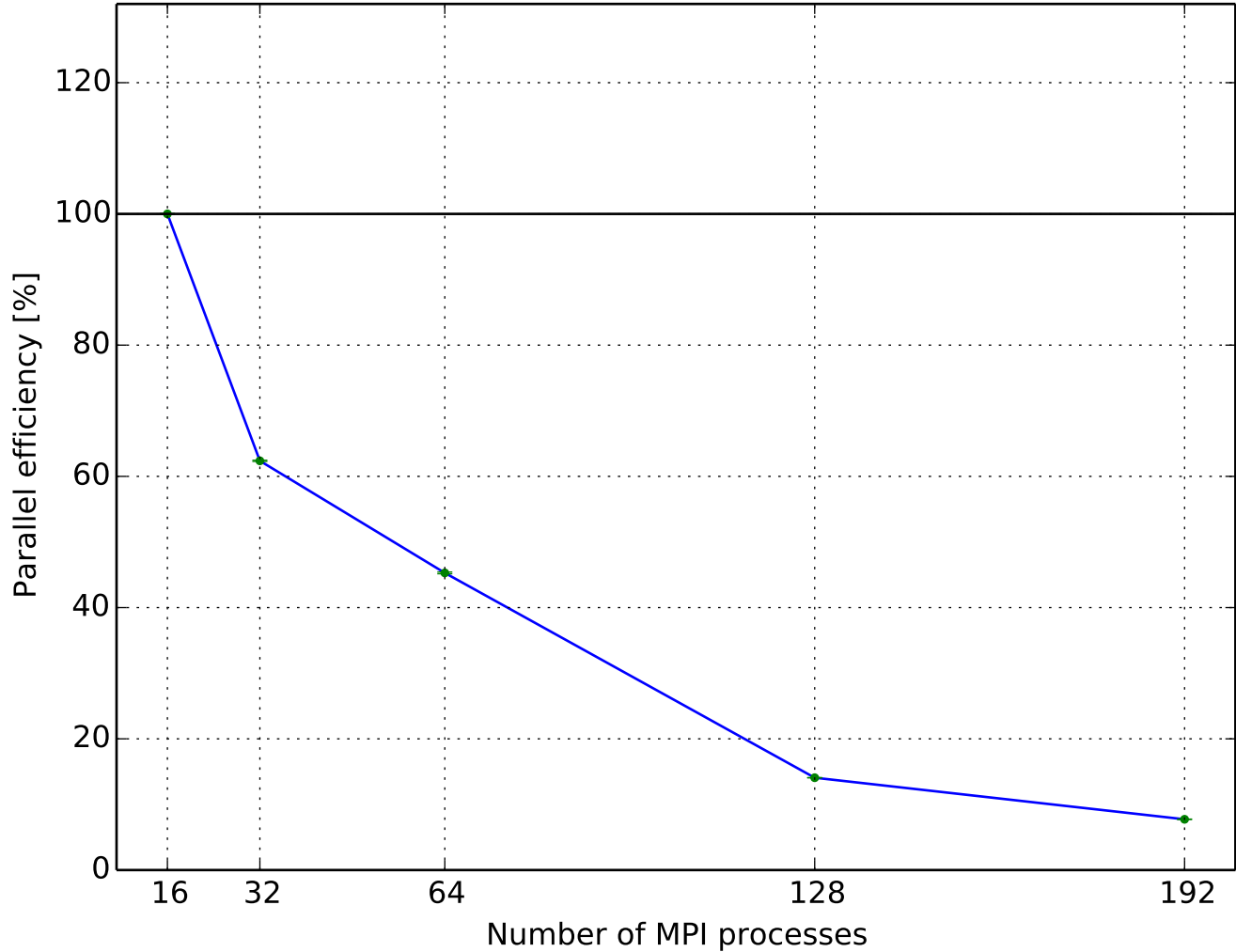
Execution time per time step
(1.48732M cells, Smagorinsky ,GAMG-nonBlockingGaussSeidel)



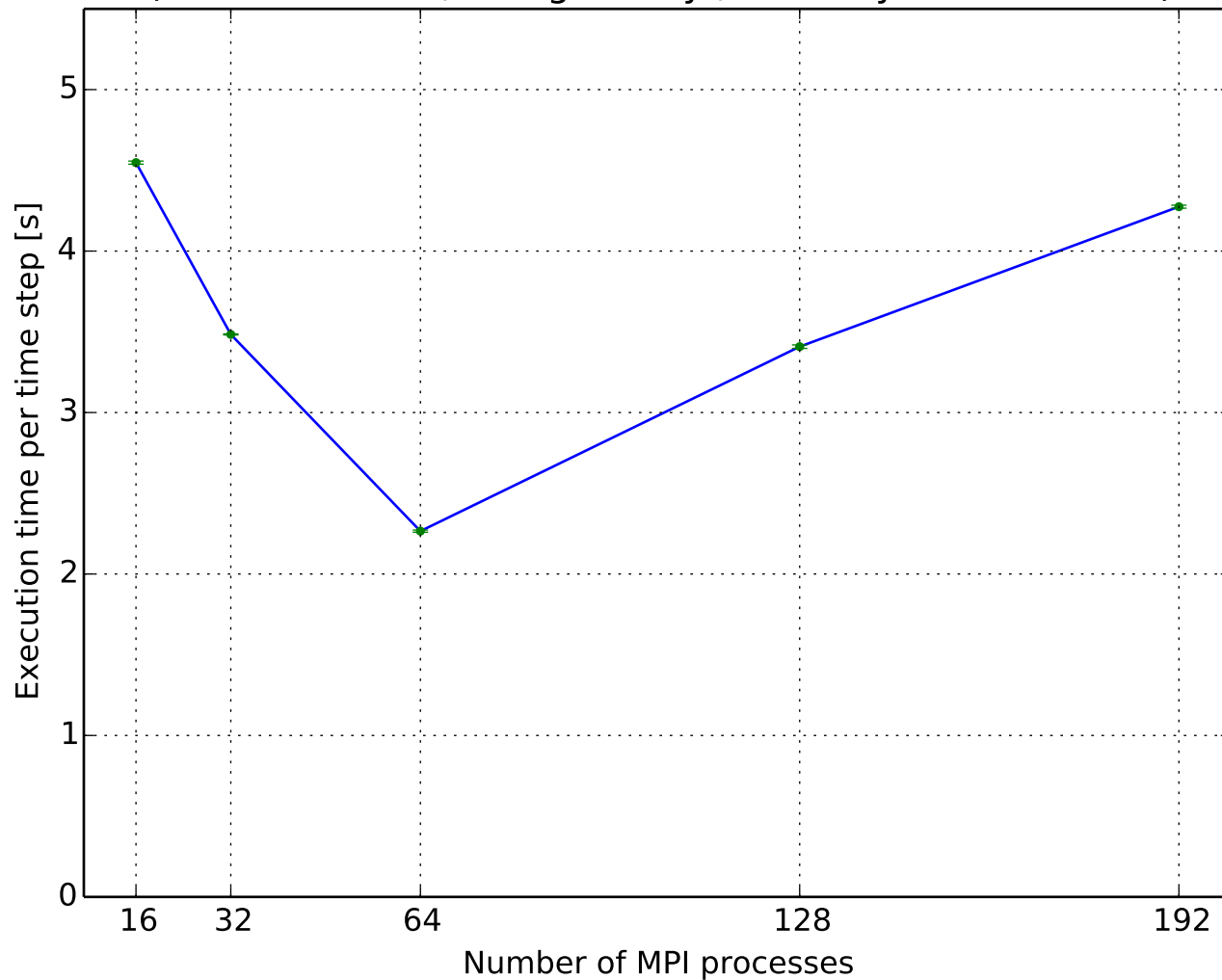
Speedup ratio
(1.48732M cells, Smagorinsky ,GAMG-nonBlockingGaussSeidel)



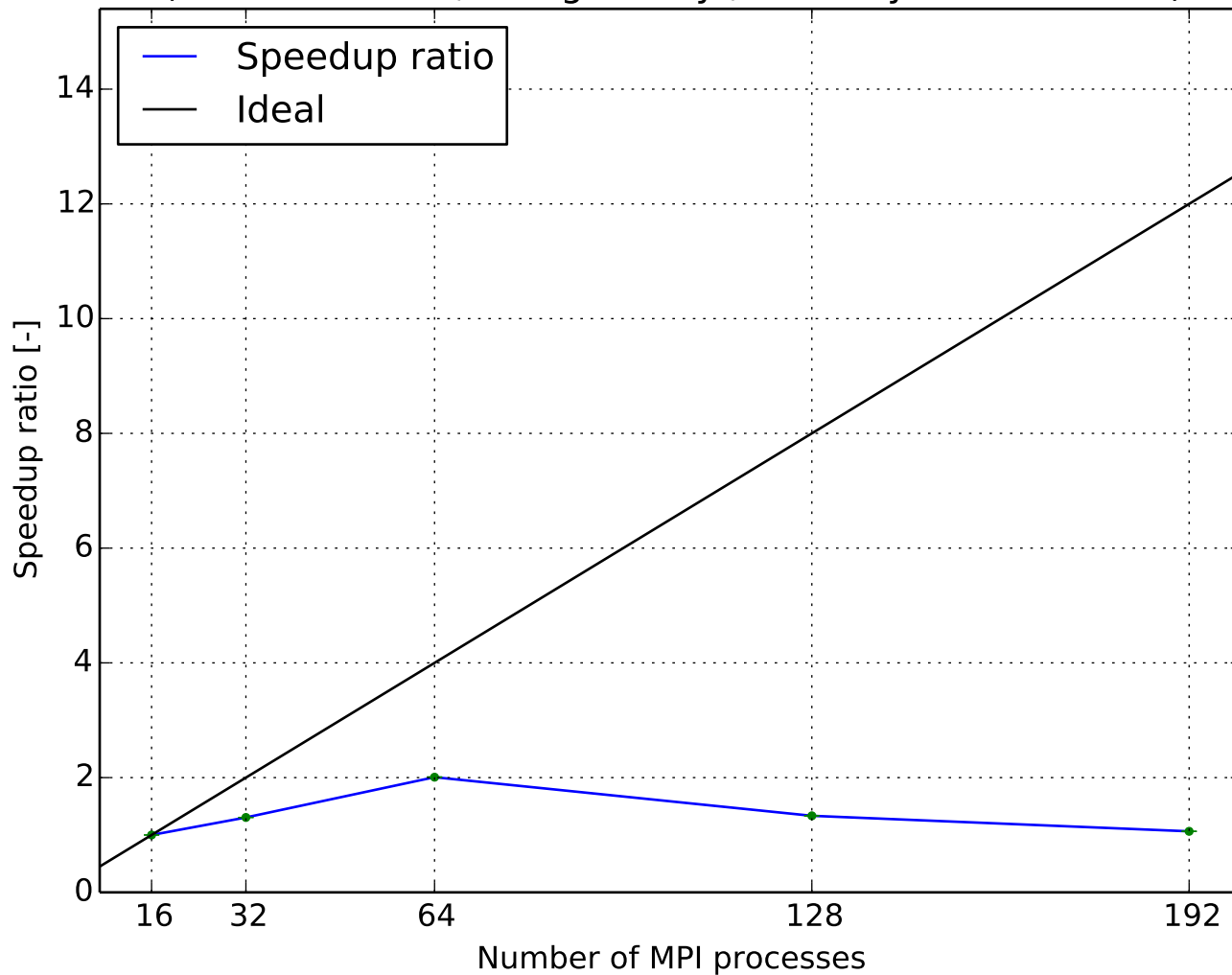
Parallel efficiency
(1.48732M cells, Smagorinsky ,GAMG-nonBlockingGaussSeidel)



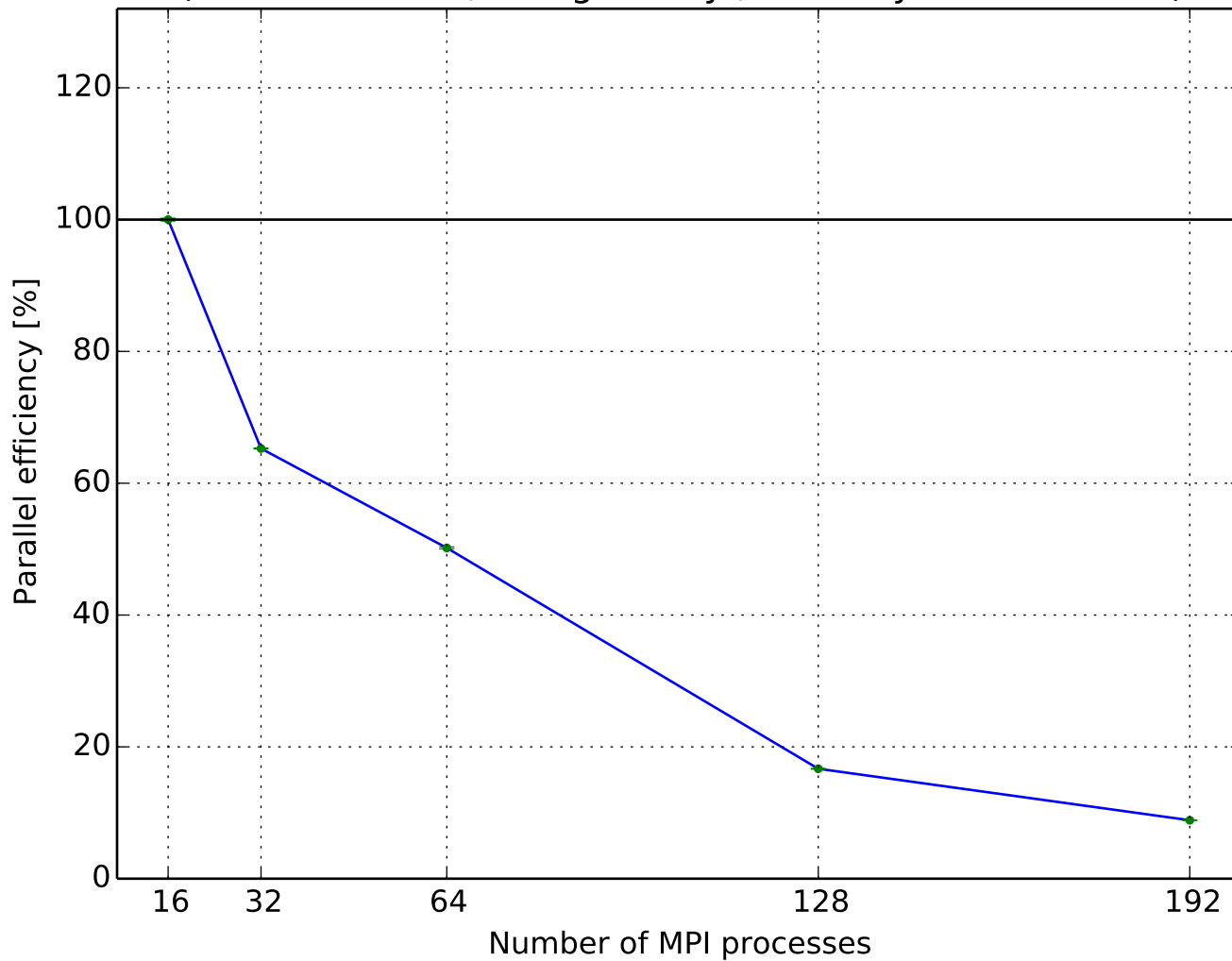
Execution time per time step
(1.48732M cells, Smagorinsky ,GAMG-symGaussSeidel)



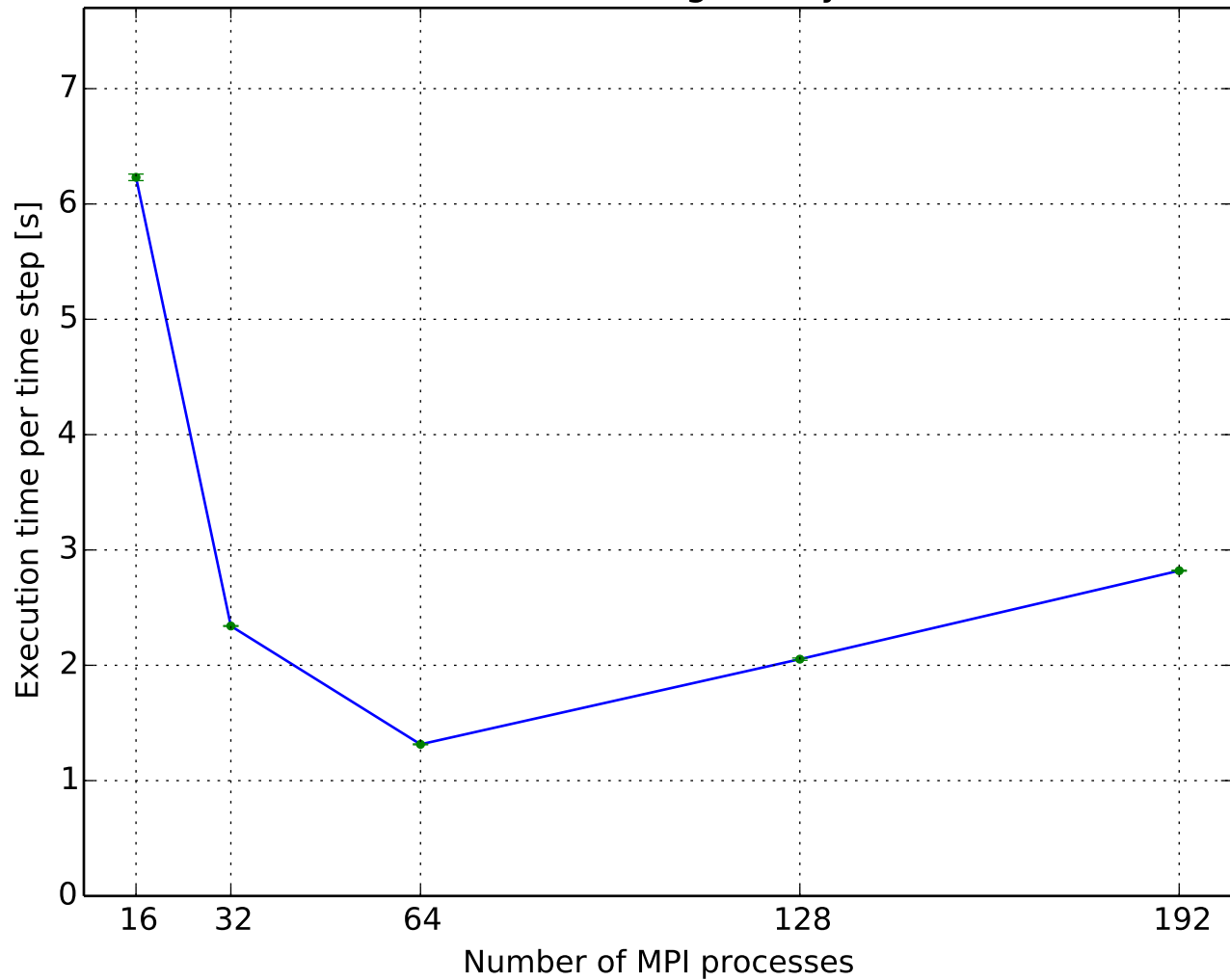
Speedup ratio
(1.48732M cells, Smagorinsky ,GAMG-symGaussSeidel)



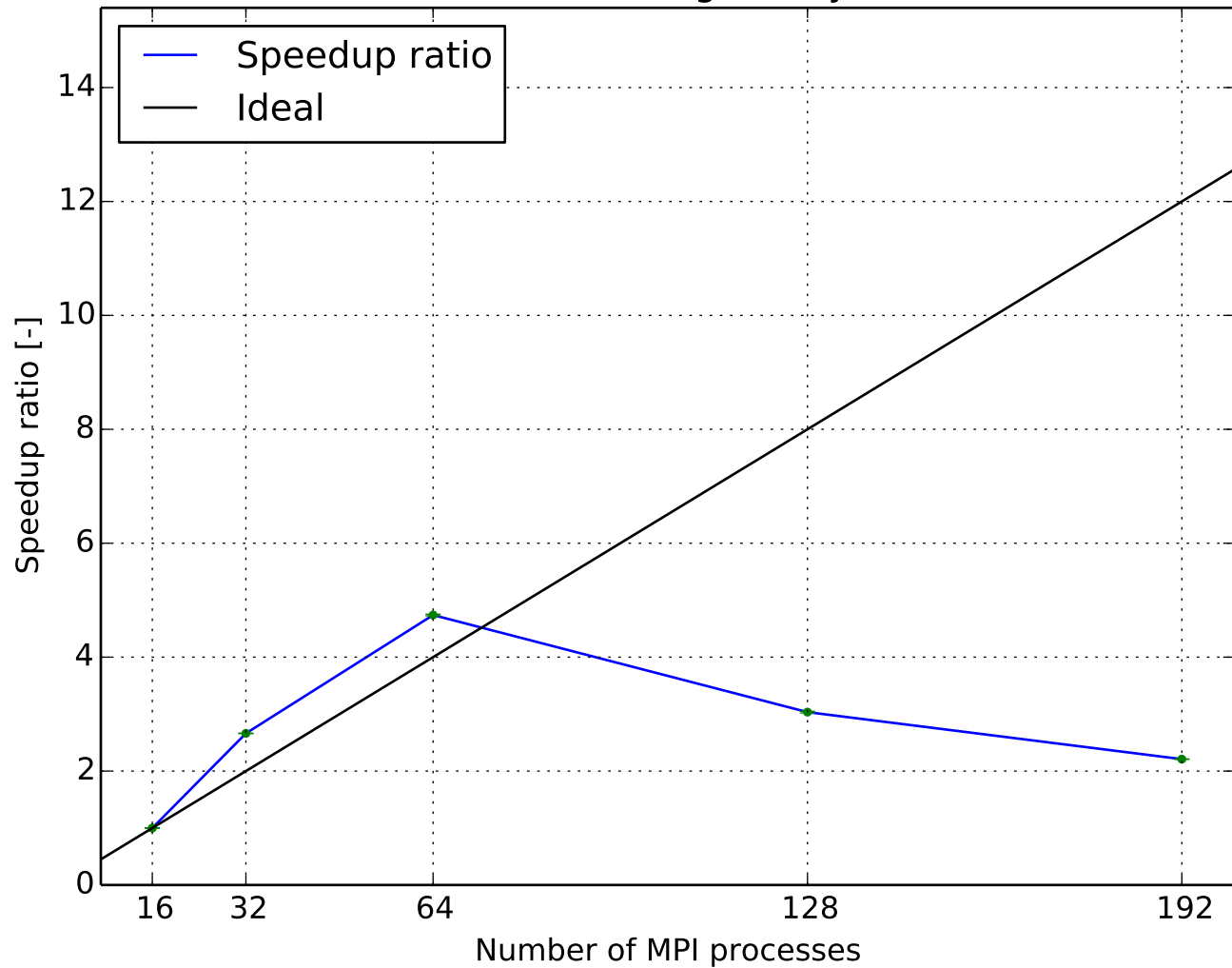
Parallel efficiency
(1.48732M cells, Smagorinsky ,GAMG-symGaussSeidel)



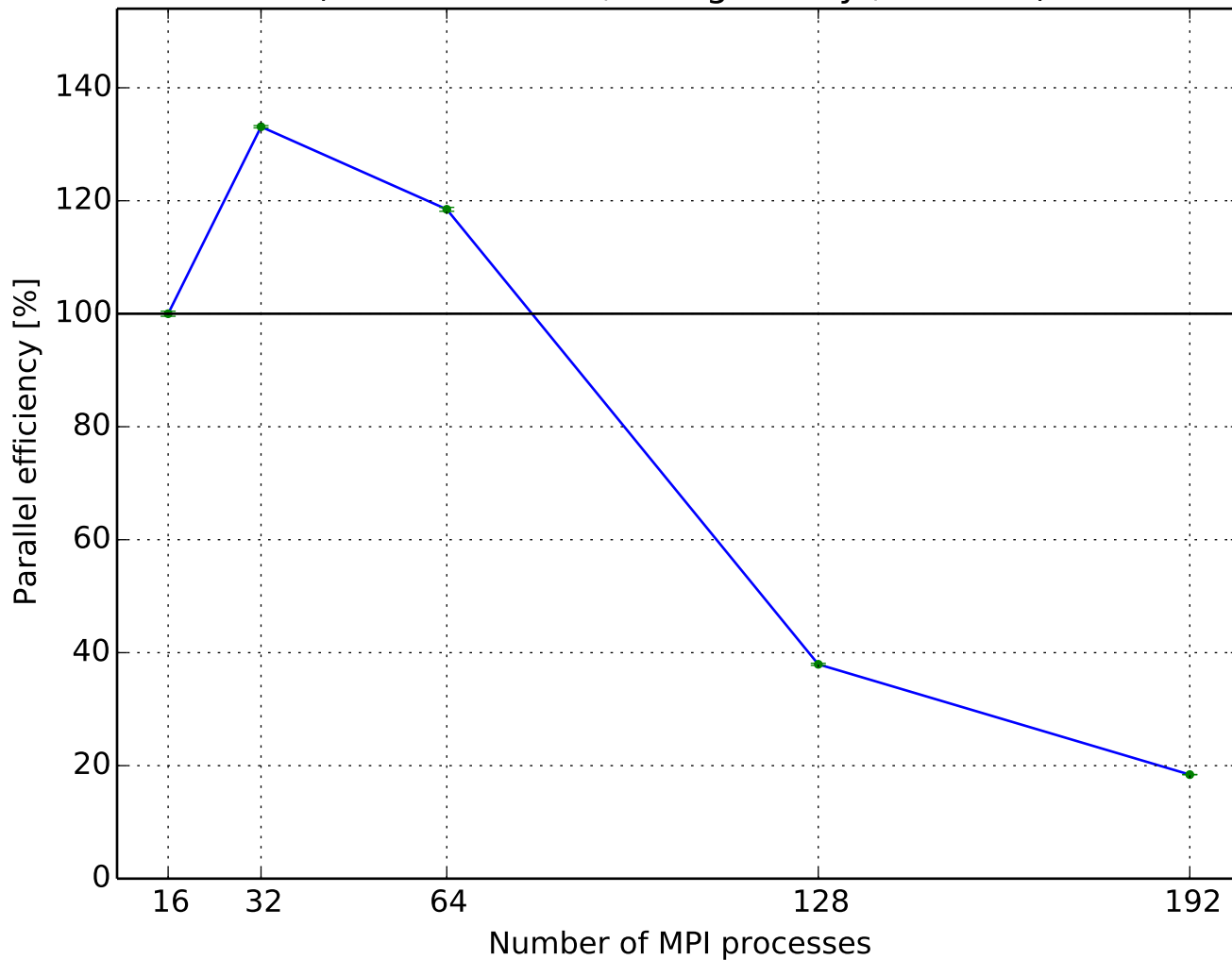
Execution time per time step
(1.48732M cells, Smagorinsky ,PCG-DIC)



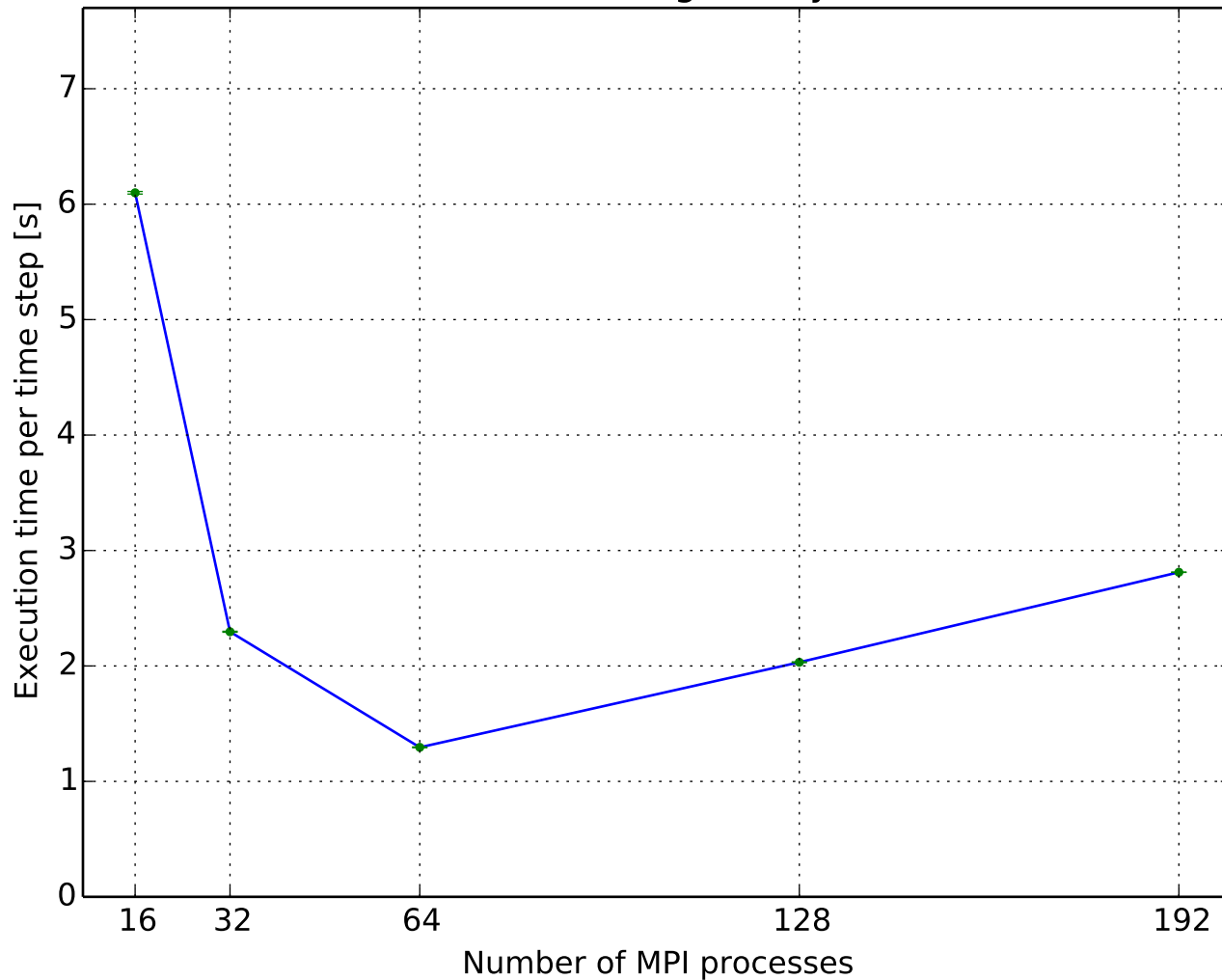
Speedup ratio
(1.48732M cells, Smagorinsky ,PCG-DIC)



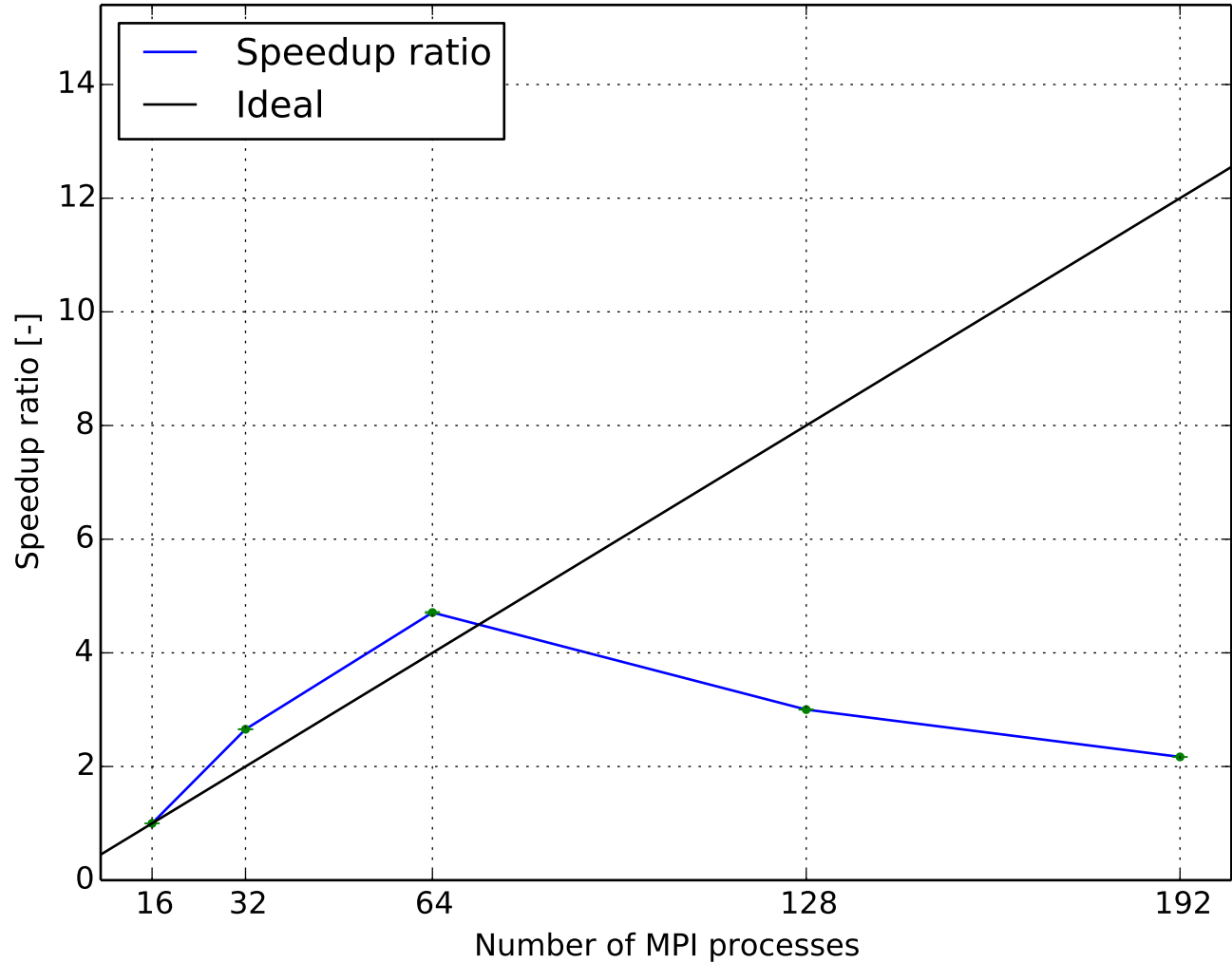
Parallel efficiency
(1.48732M cells, Smagorinsky ,PCG-DIC)



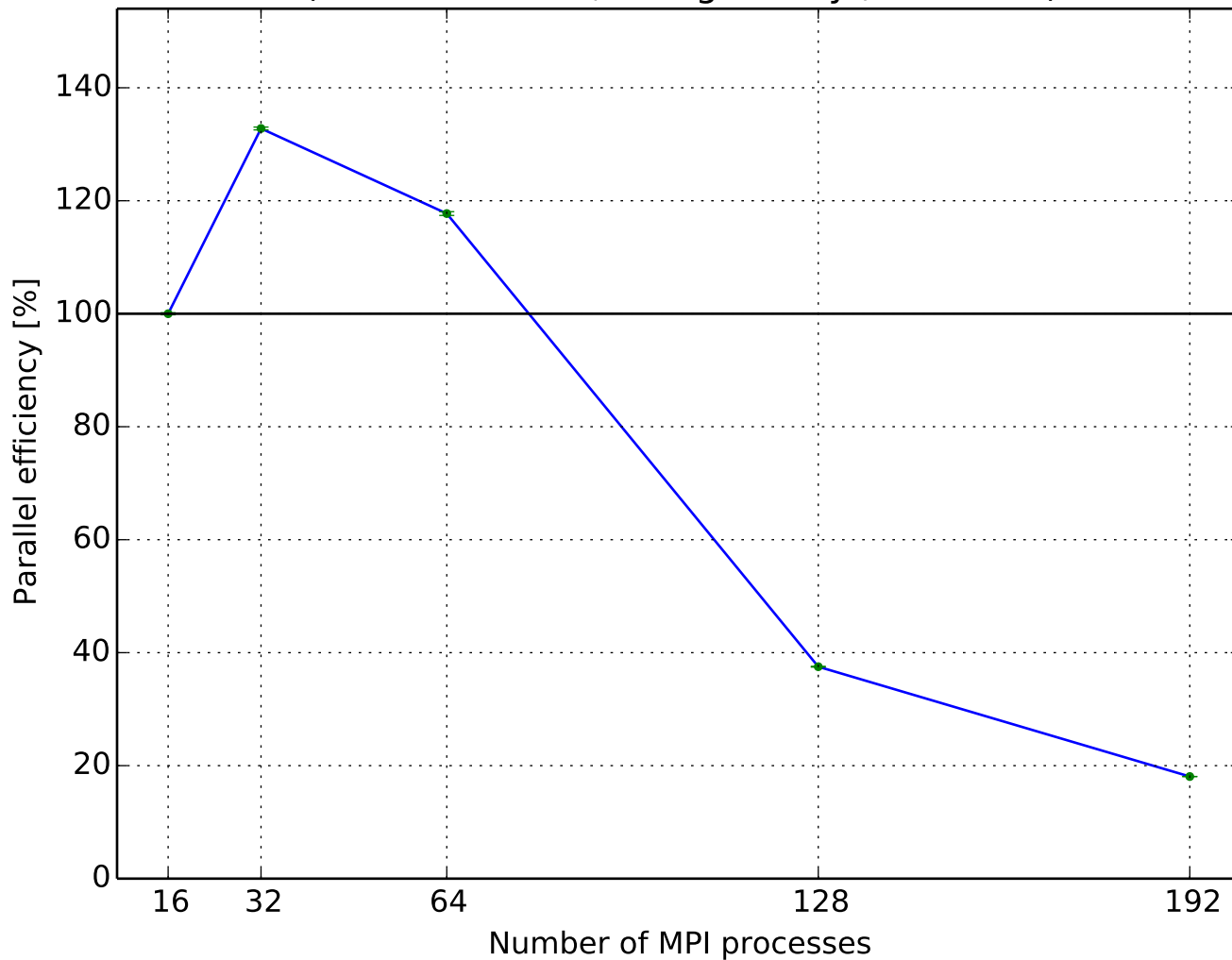
Execution time per time step
(1.48732M cells, Smagorinsky ,PCG-FDIC)



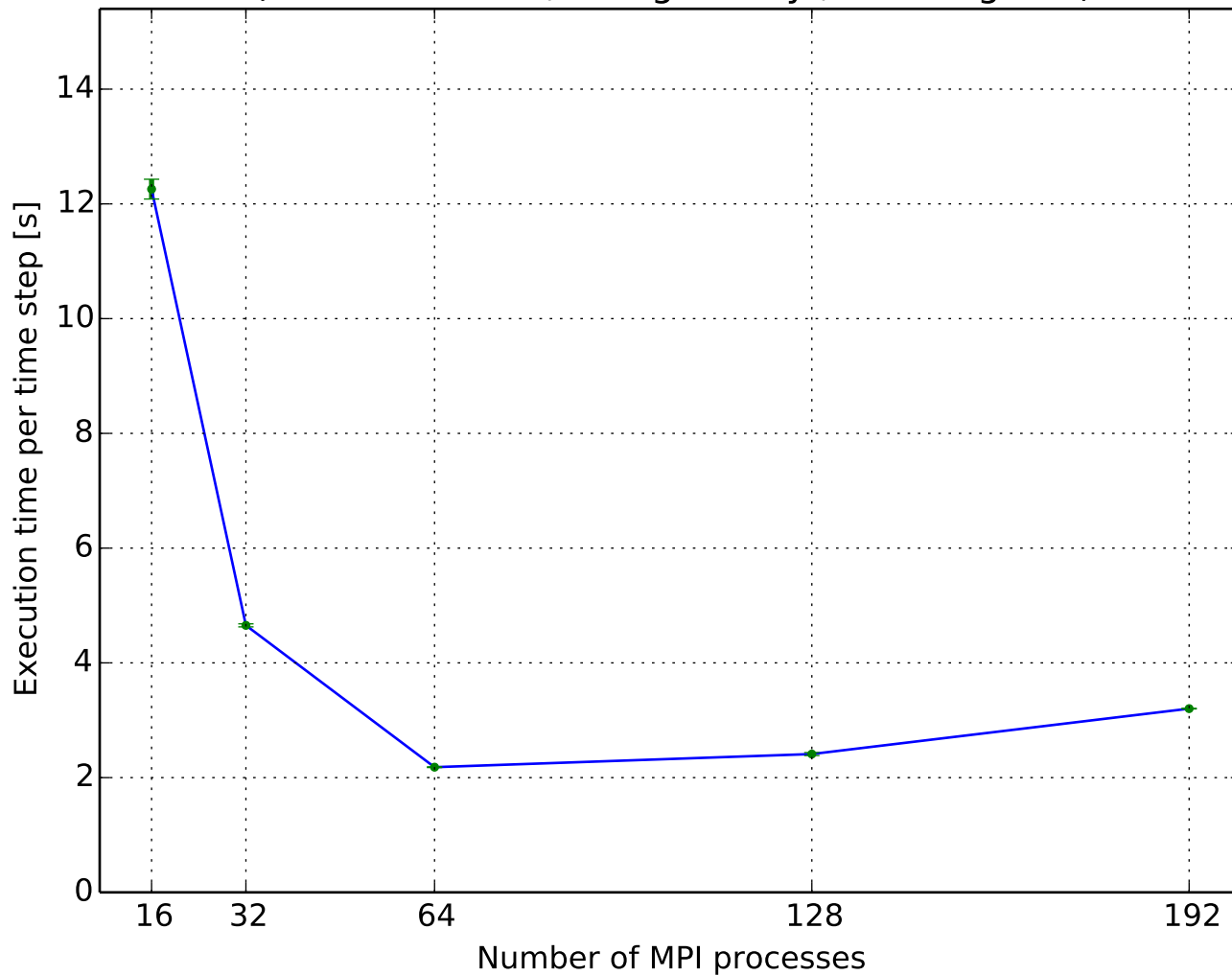
Speedup ratio
(1.48732M cells, Smagorinsky ,PCG-FDIC)



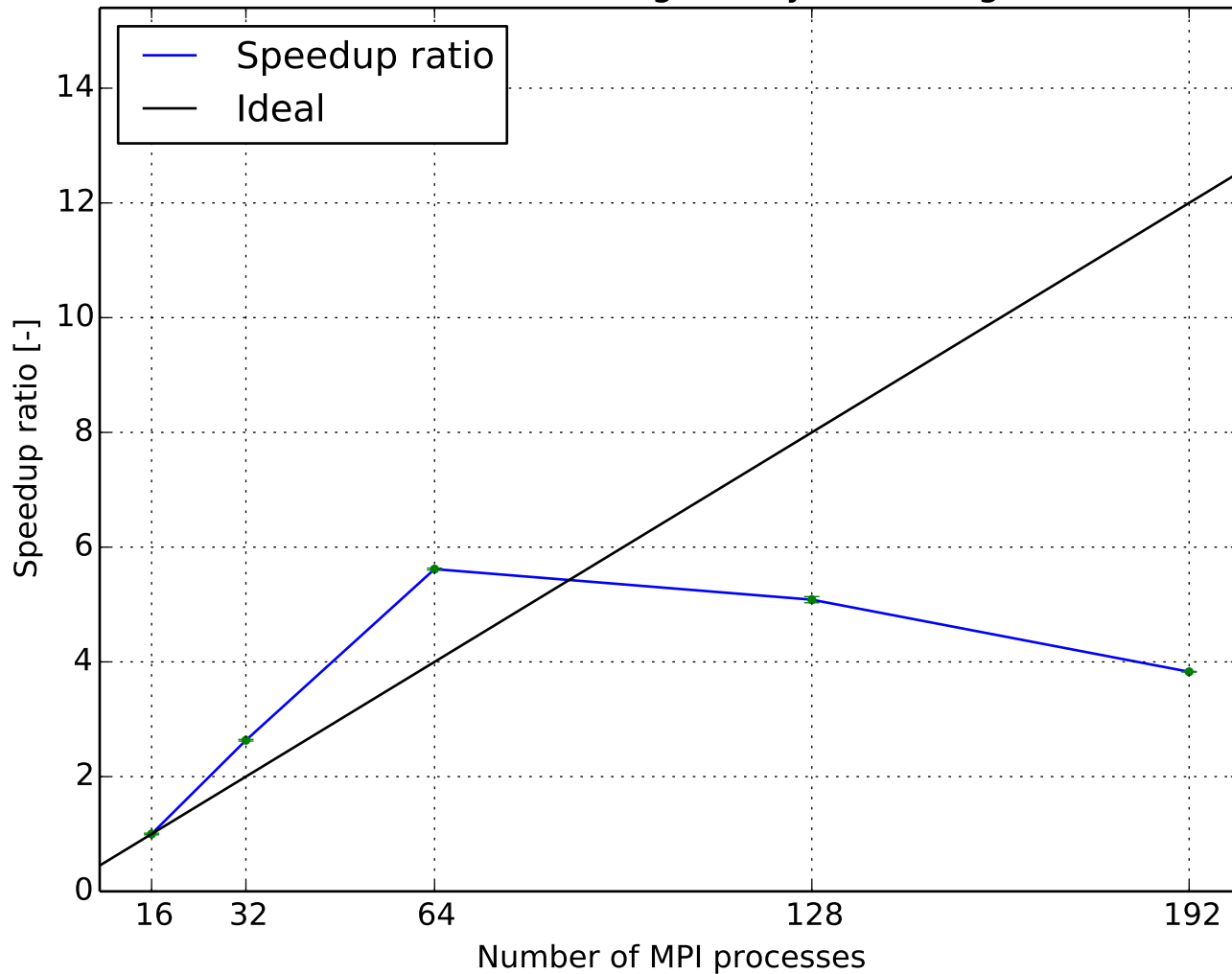
Parallel efficiency
(1.48732M cells, Smagorinsky ,PCG-FDIC)



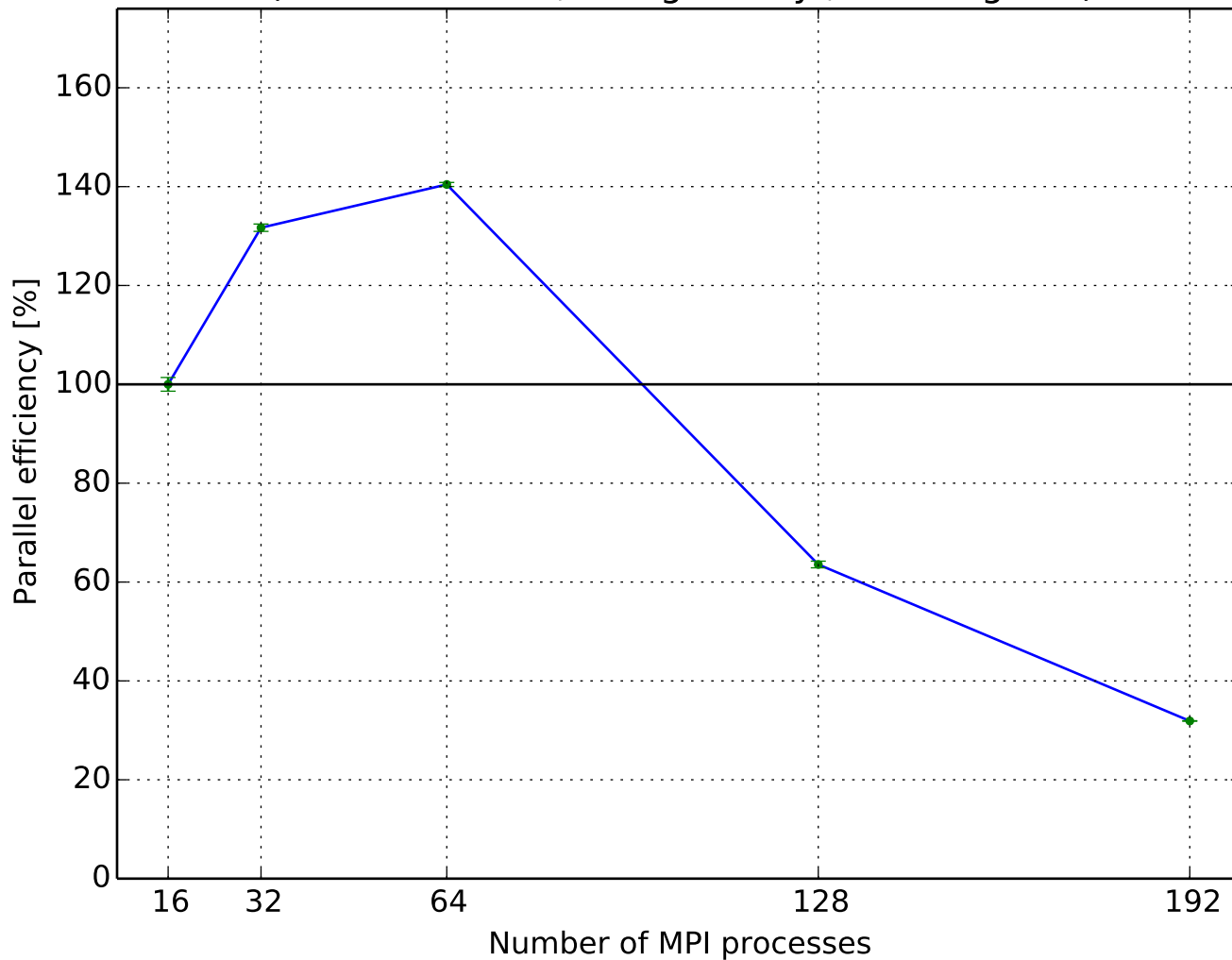
Execution time per time step
(1.48732M cells, Smagorinsky ,PCG-diagonal)



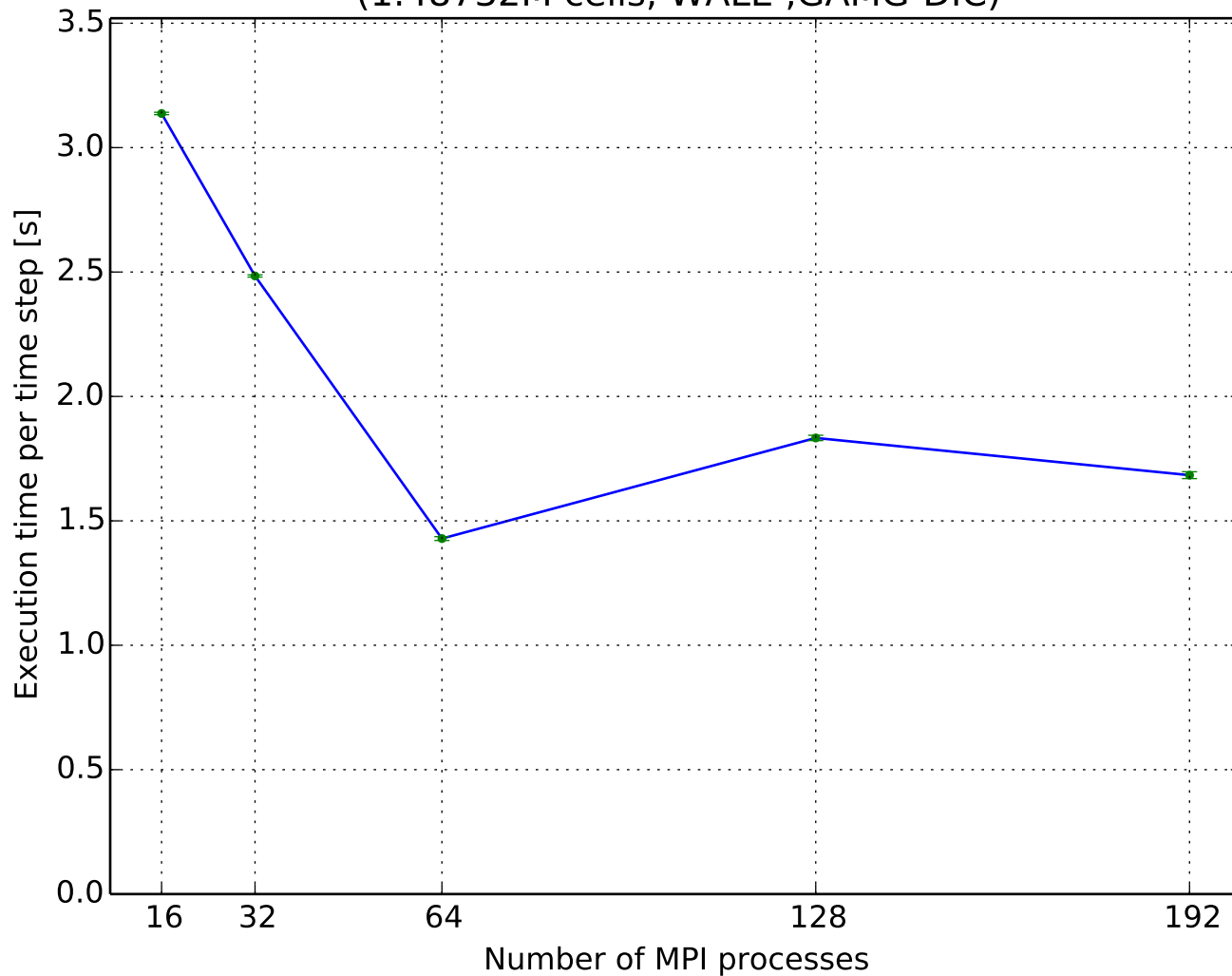
Speedup ratio
(1.48732M cells, Smagorinsky ,PCG-diagonal)



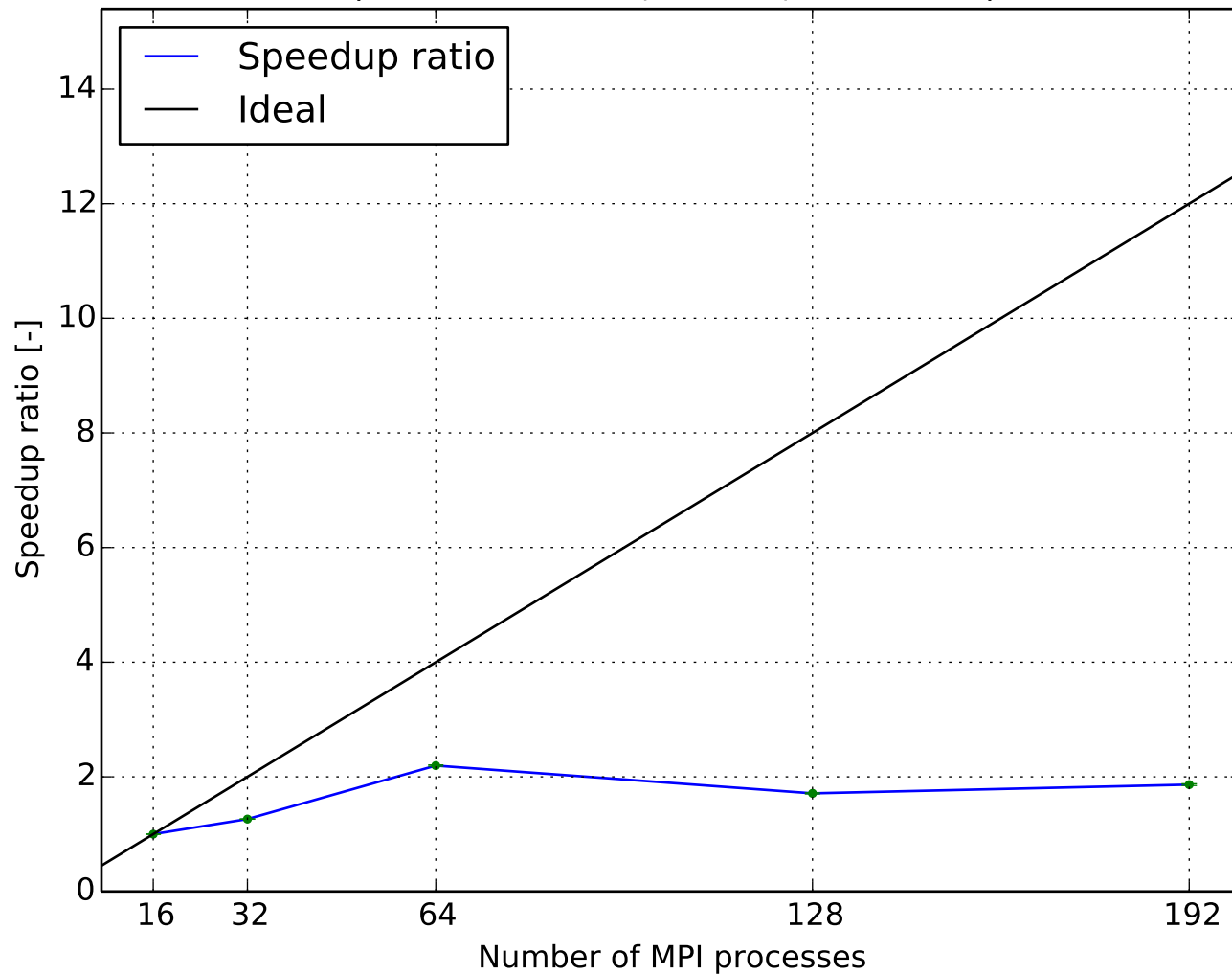
Parallel efficiency
(1.48732M cells, Smagorinsky ,PCG-diagonal)



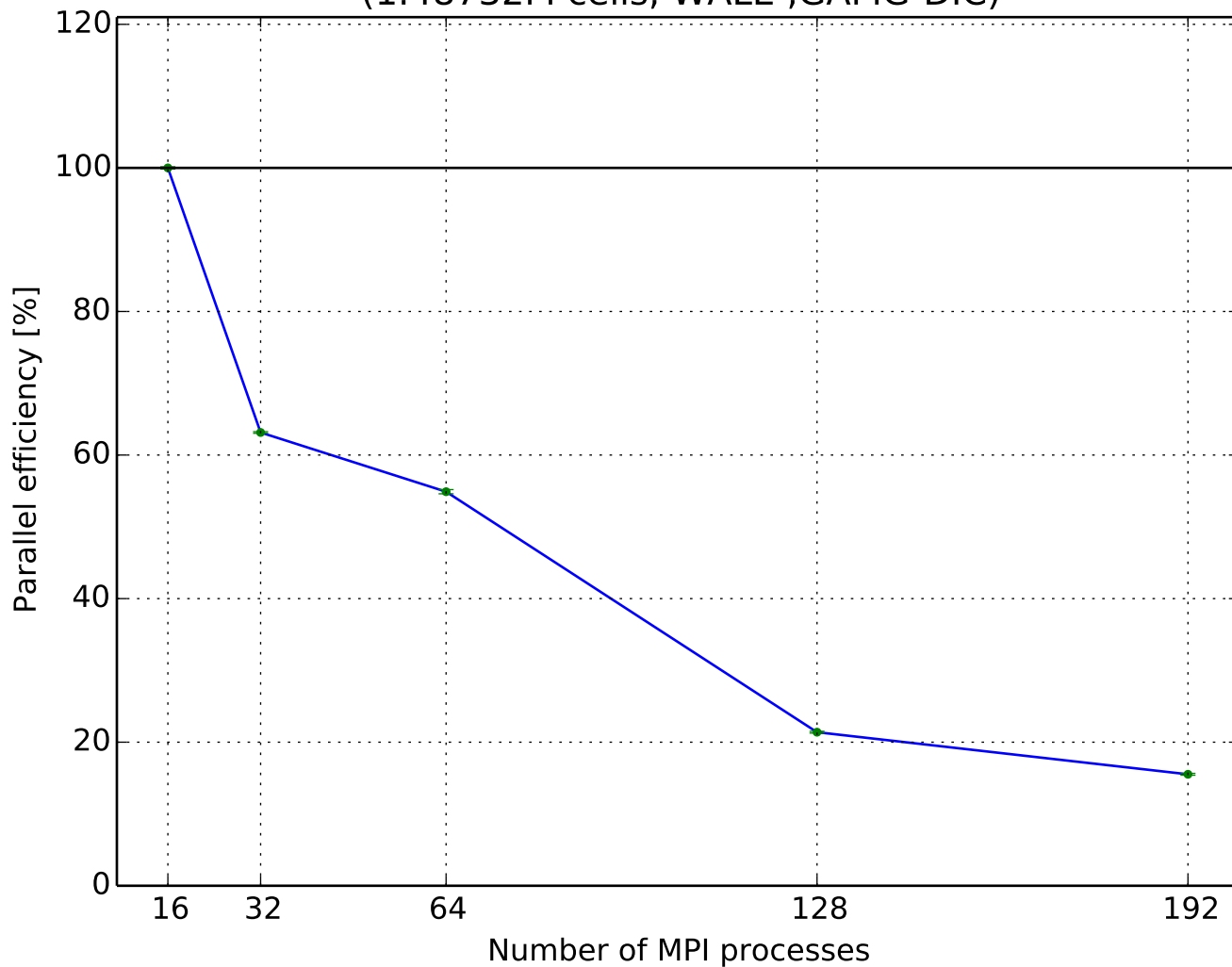
Execution time per time step
(1.48732M cells, WALE ,GAMG-DIC)



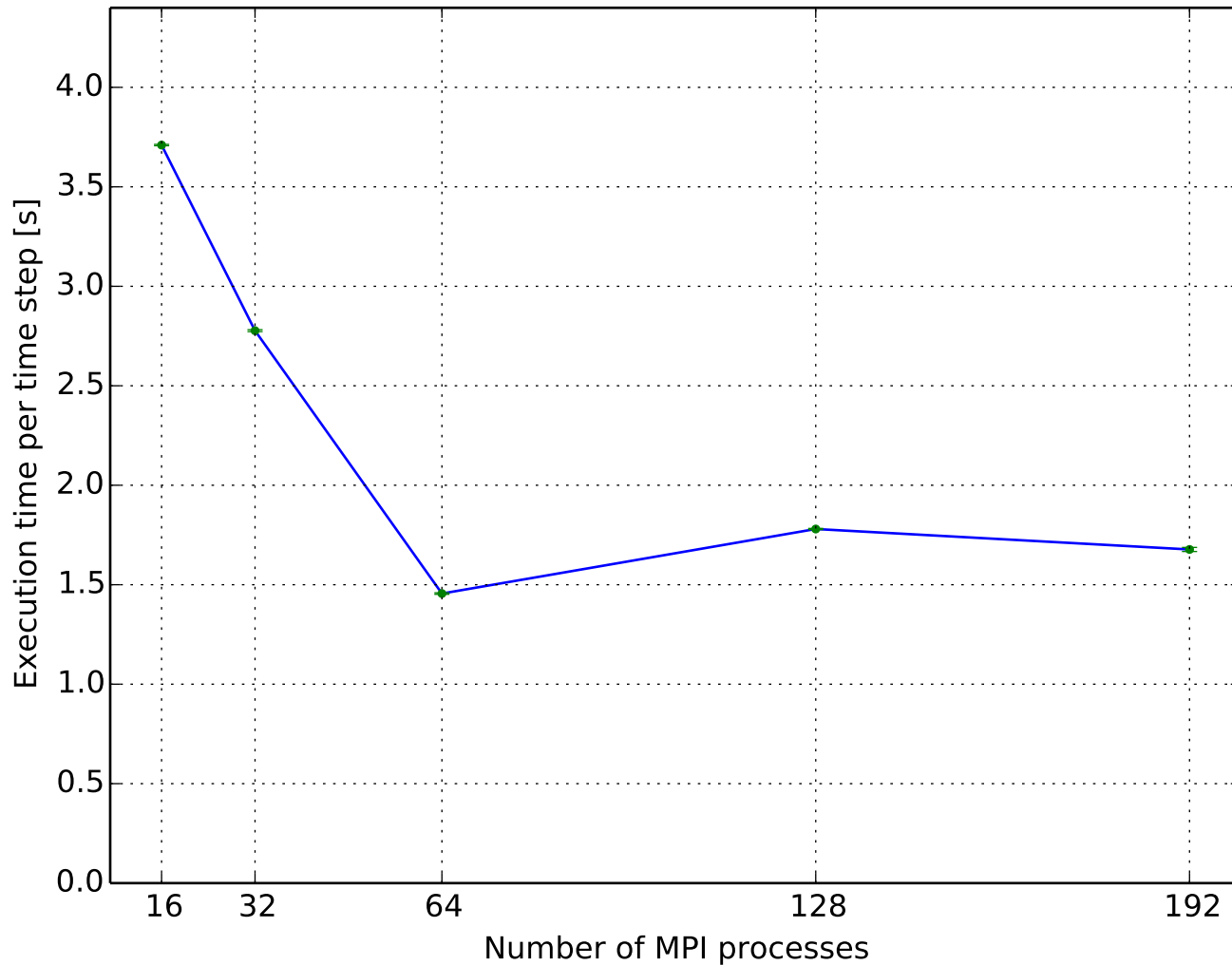
Speedup ratio
(1.48732M cells, WALE ,GAMG-DIC)



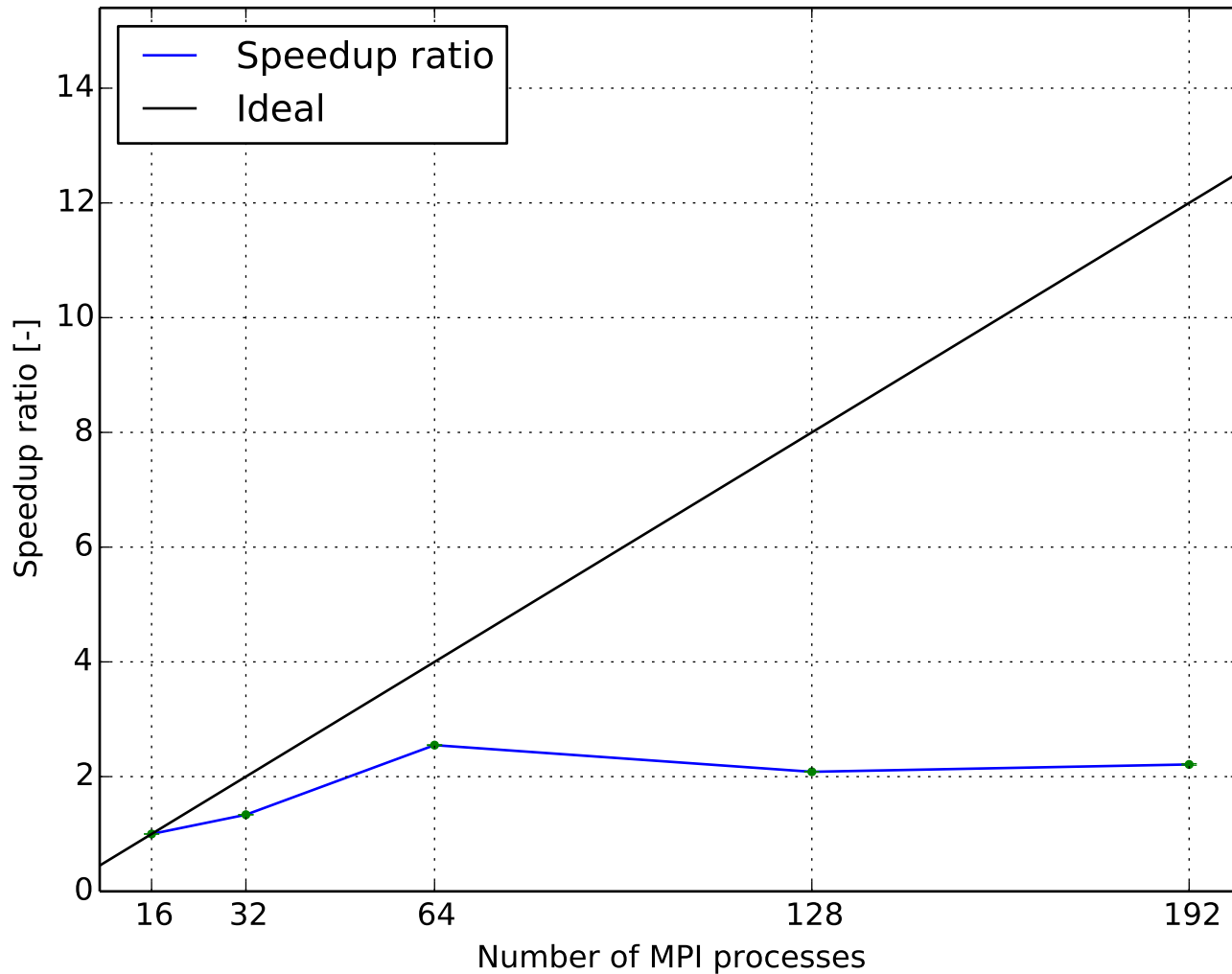
Parallel efficiency
(1.48732M cells, WALE ,GAMG-DIC)



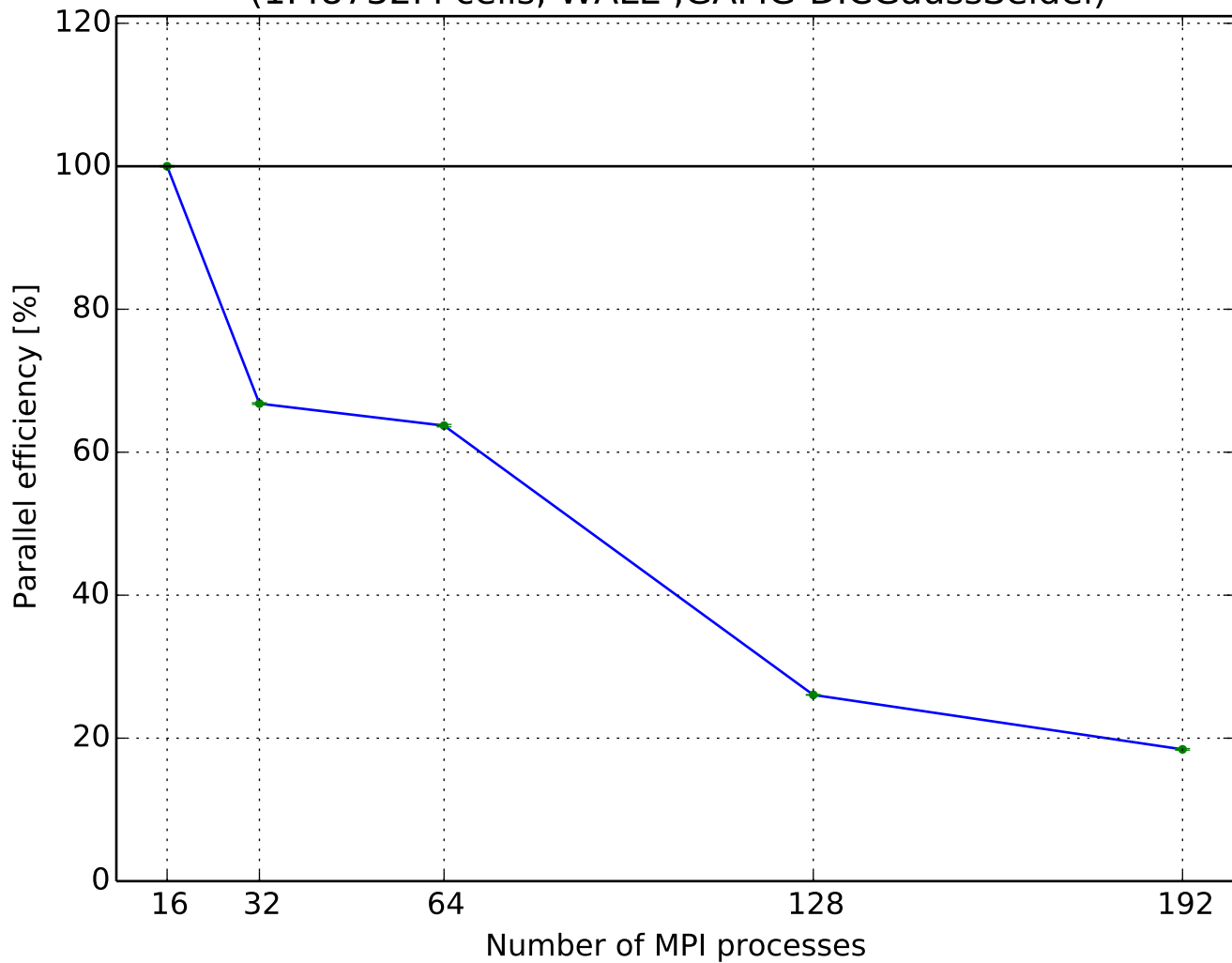
Execution time per time step
(1.48732M cells, WALE ,GAMG-DICGaussSeidel)



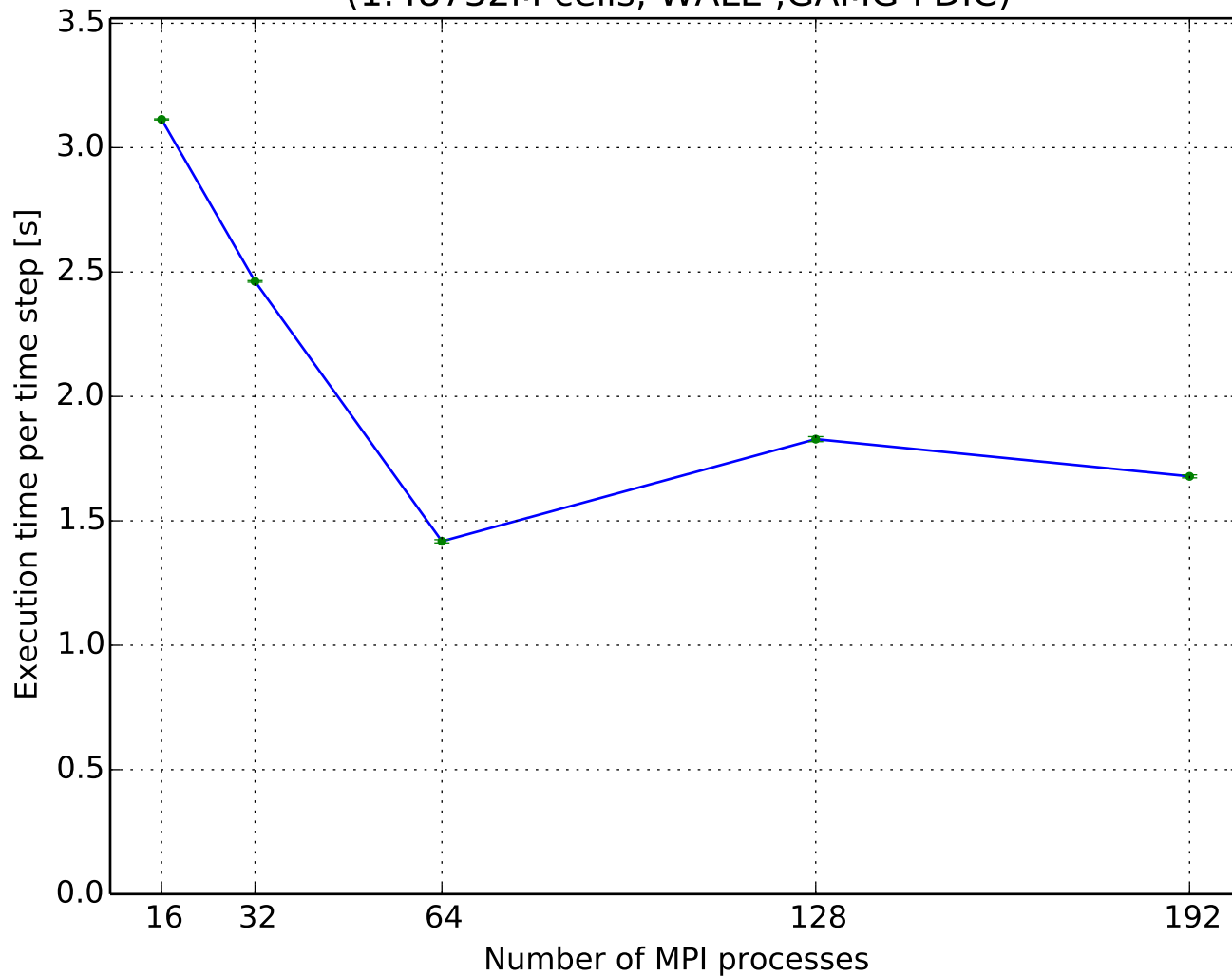
Speedup ratio
(1.48732M cells, WALE ,GAMG-DICGaussSeidel)



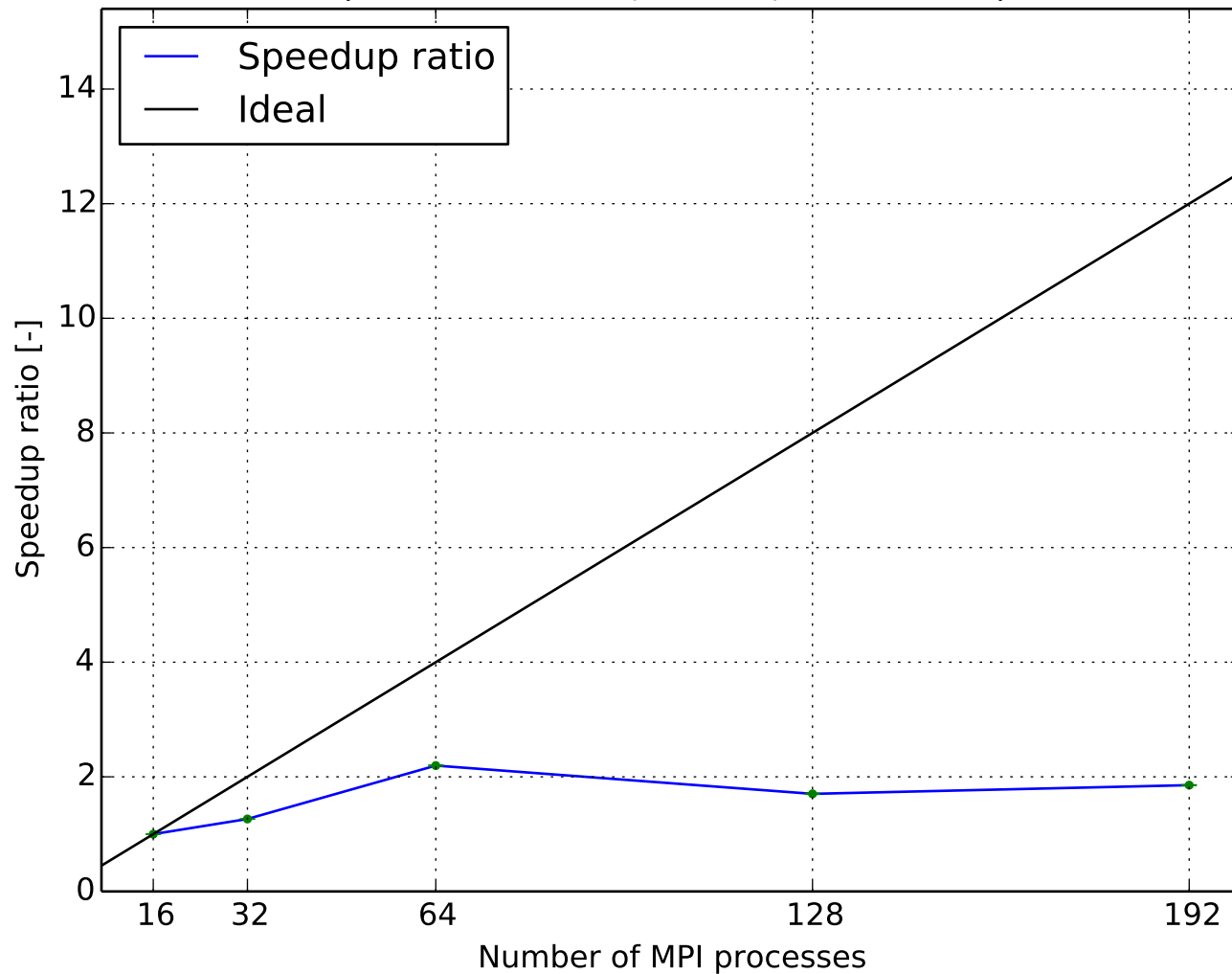
Parallel efficiency
(1.48732M cells, WALE ,GAMG-DICGaussSeidel)



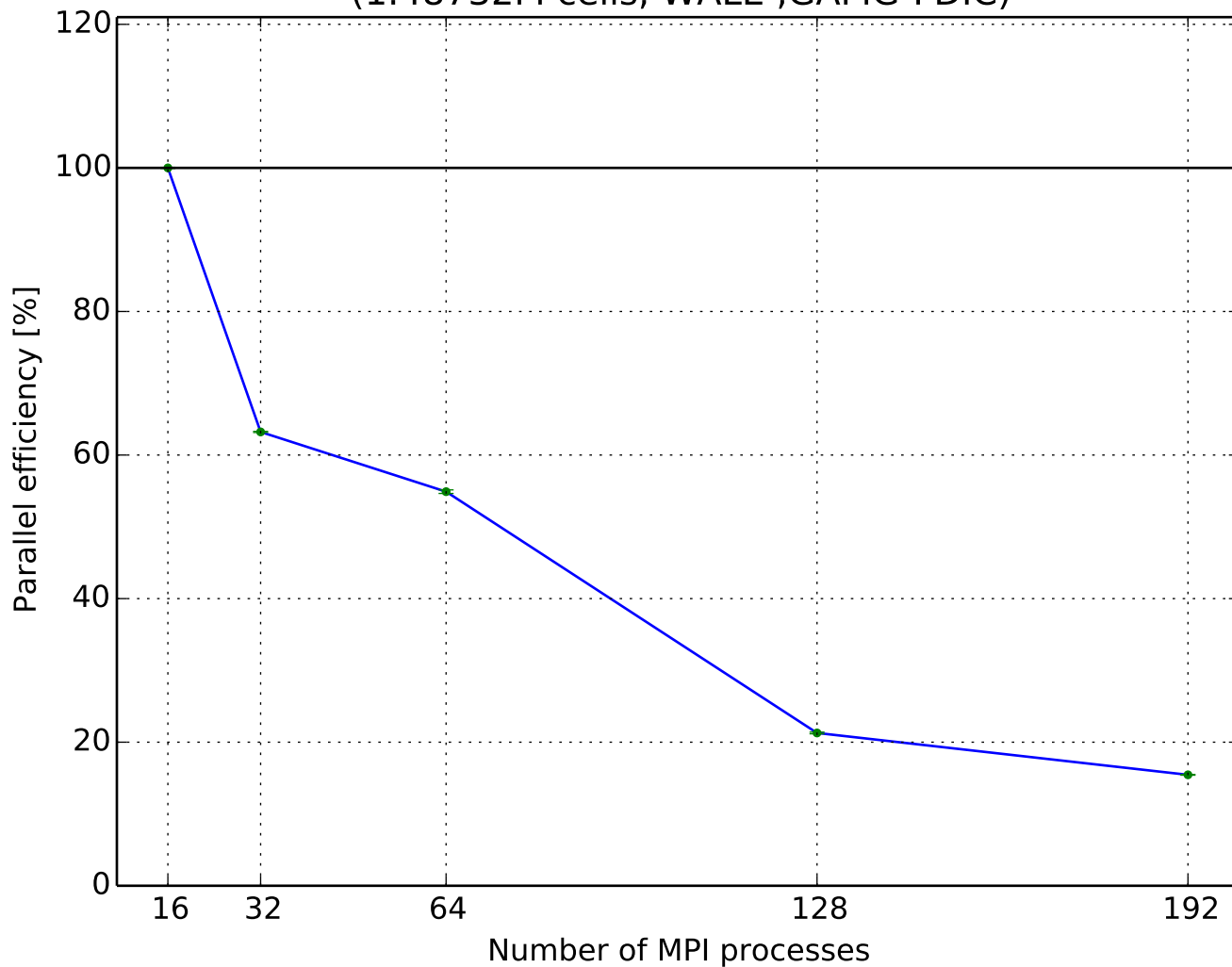
Execution time per time step
(1.48732M cells, WALE ,GAMG-FDIC)



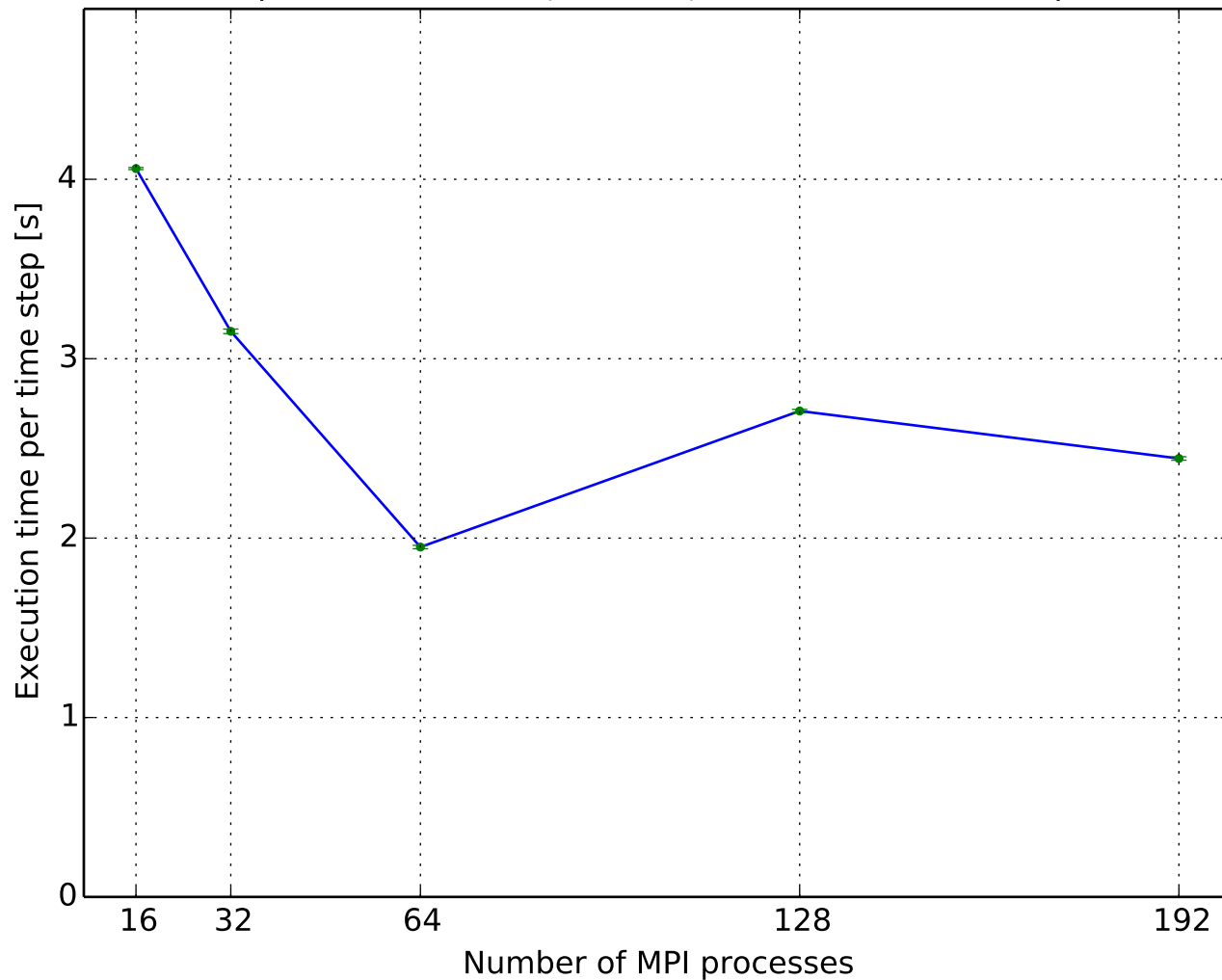
Speedup ratio
(1.48732M cells, WALE ,GAMG-FDIC)



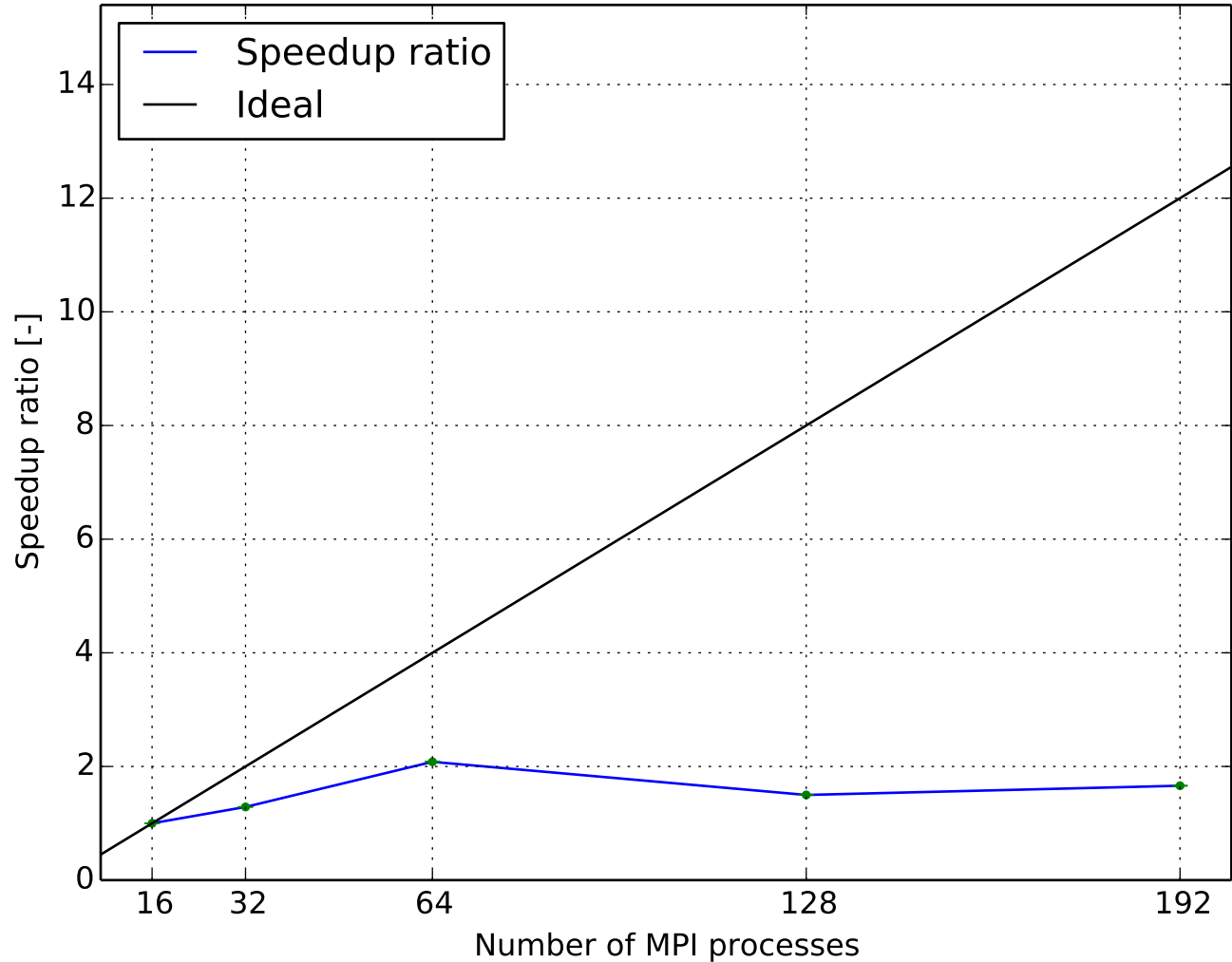
Parallel efficiency
(1.48732M cells, WALE ,GAMG-FDIC)



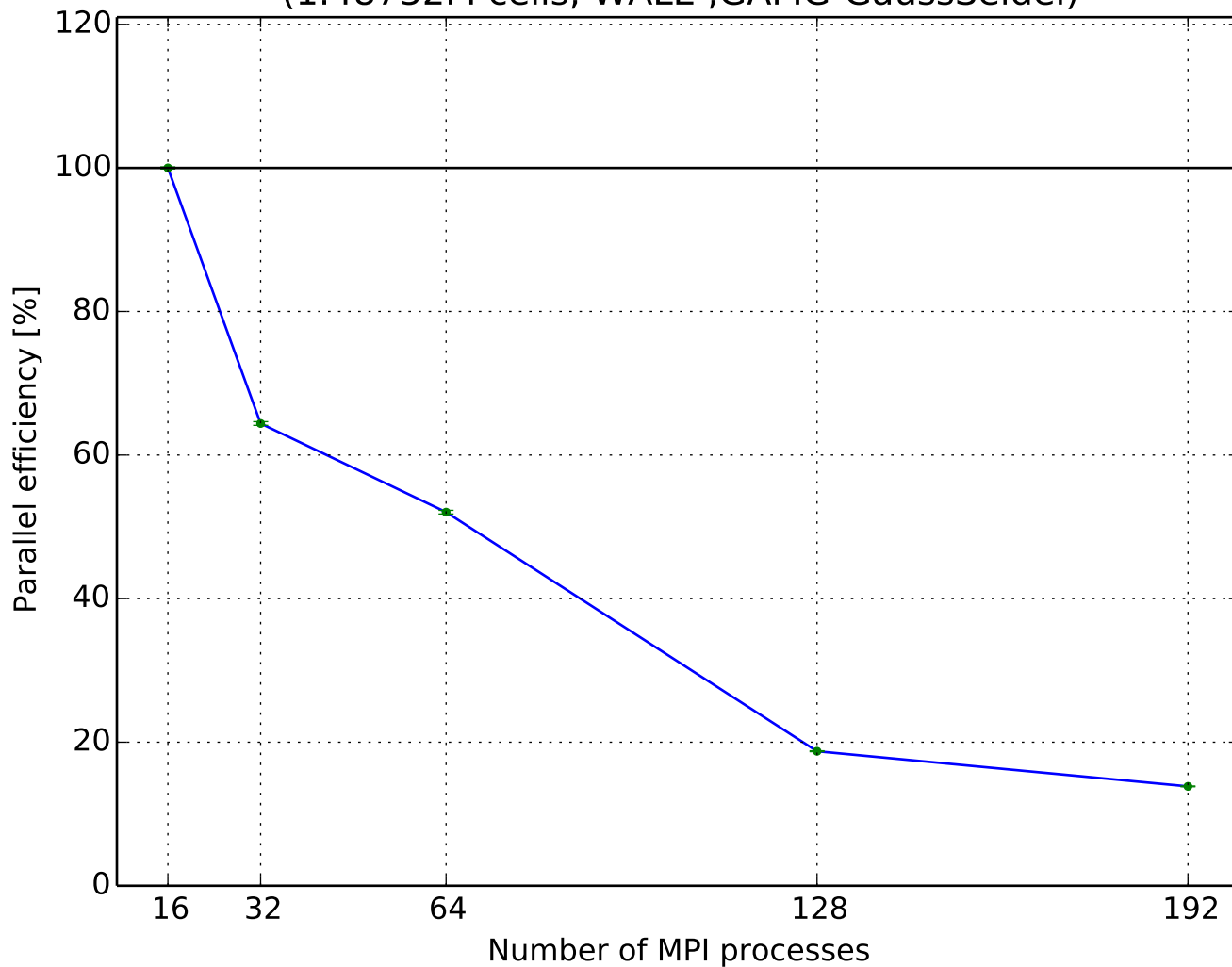
Execution time per time step
(1.48732M cells, WALE ,GAMG-GaussSeidel)



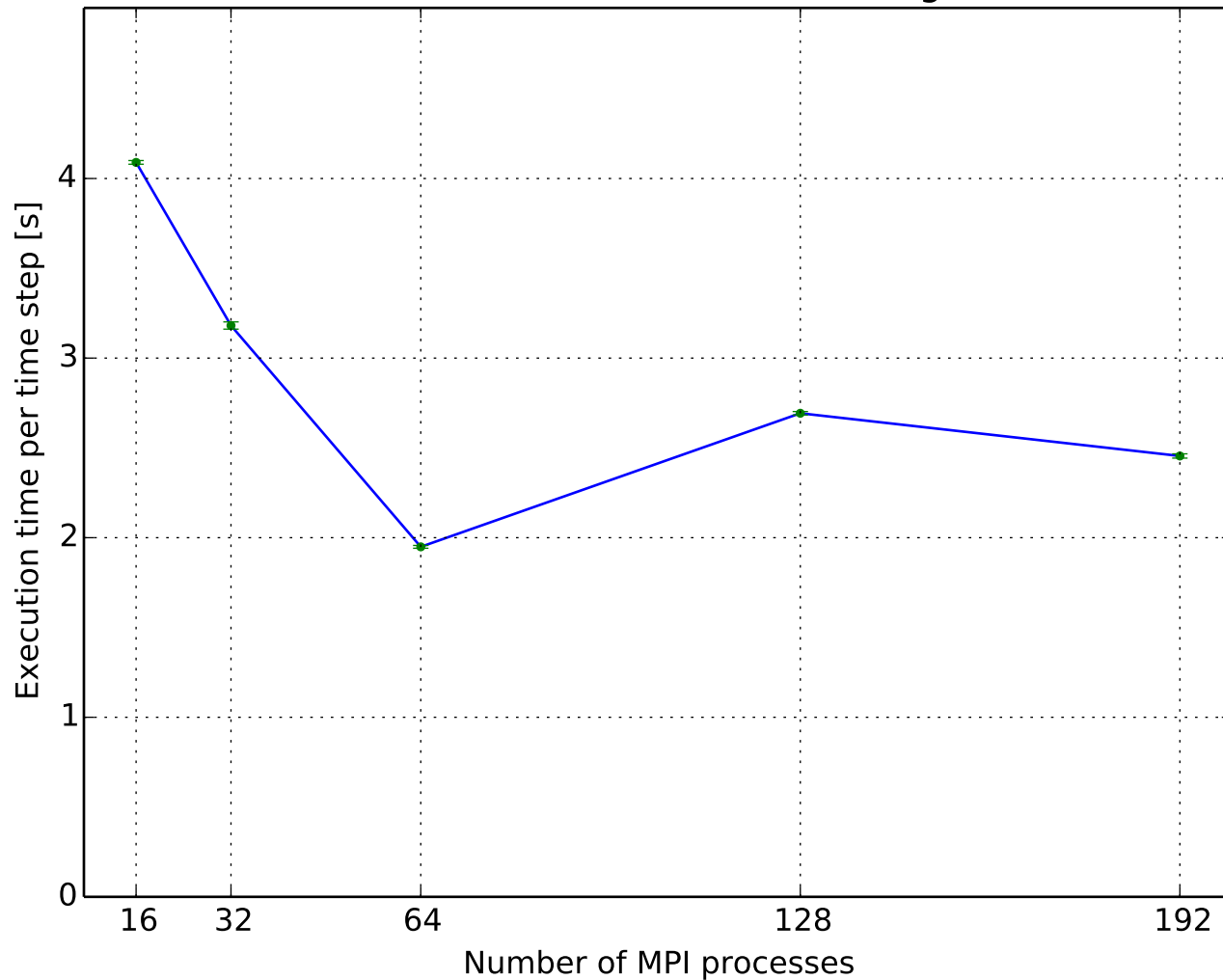
Speedup ratio
(1.48732M cells, WALE ,GAMG-GaussSeidel)



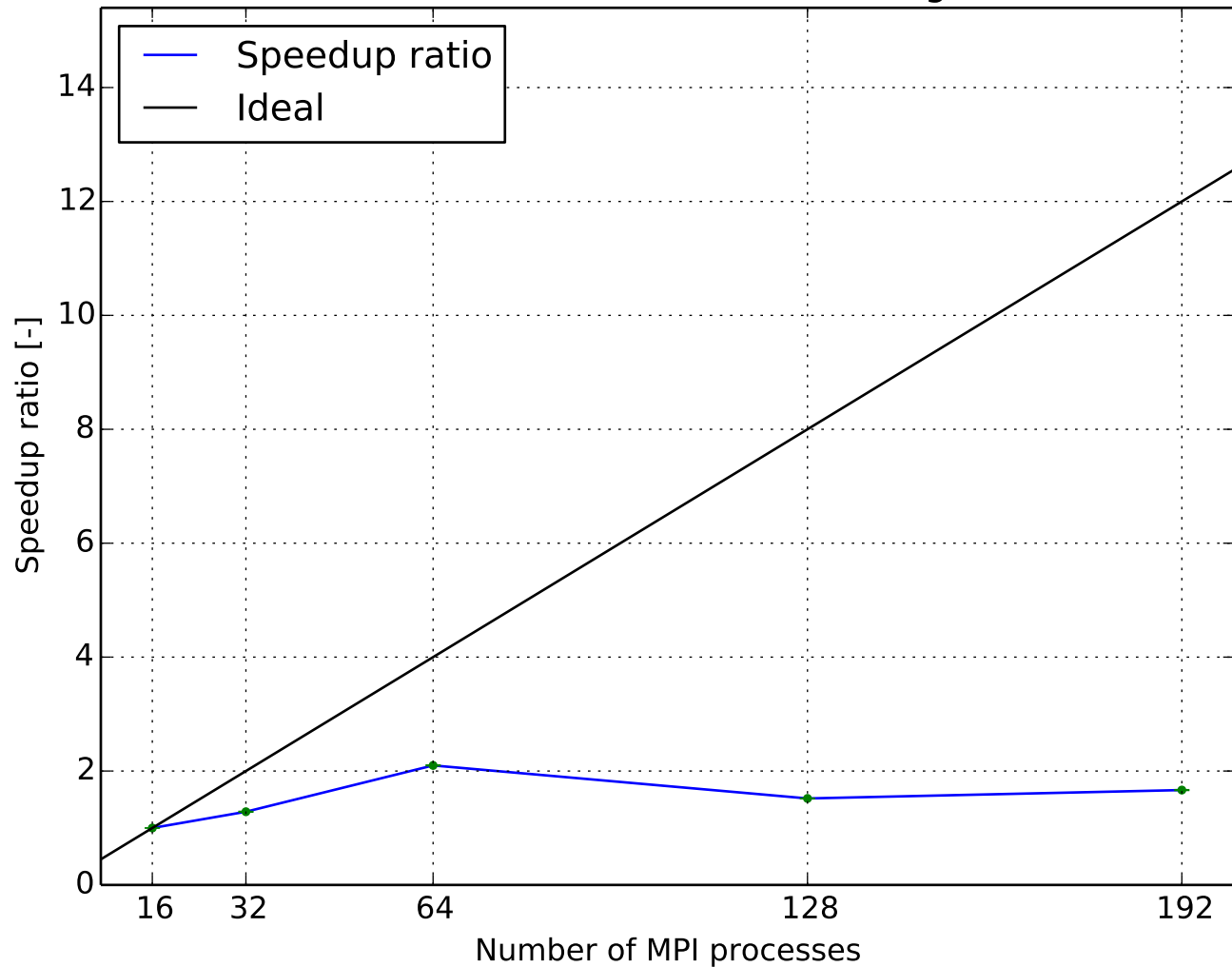
Parallel efficiency
(1.48732M cells, WALE ,GAMG-GaussSeidel)



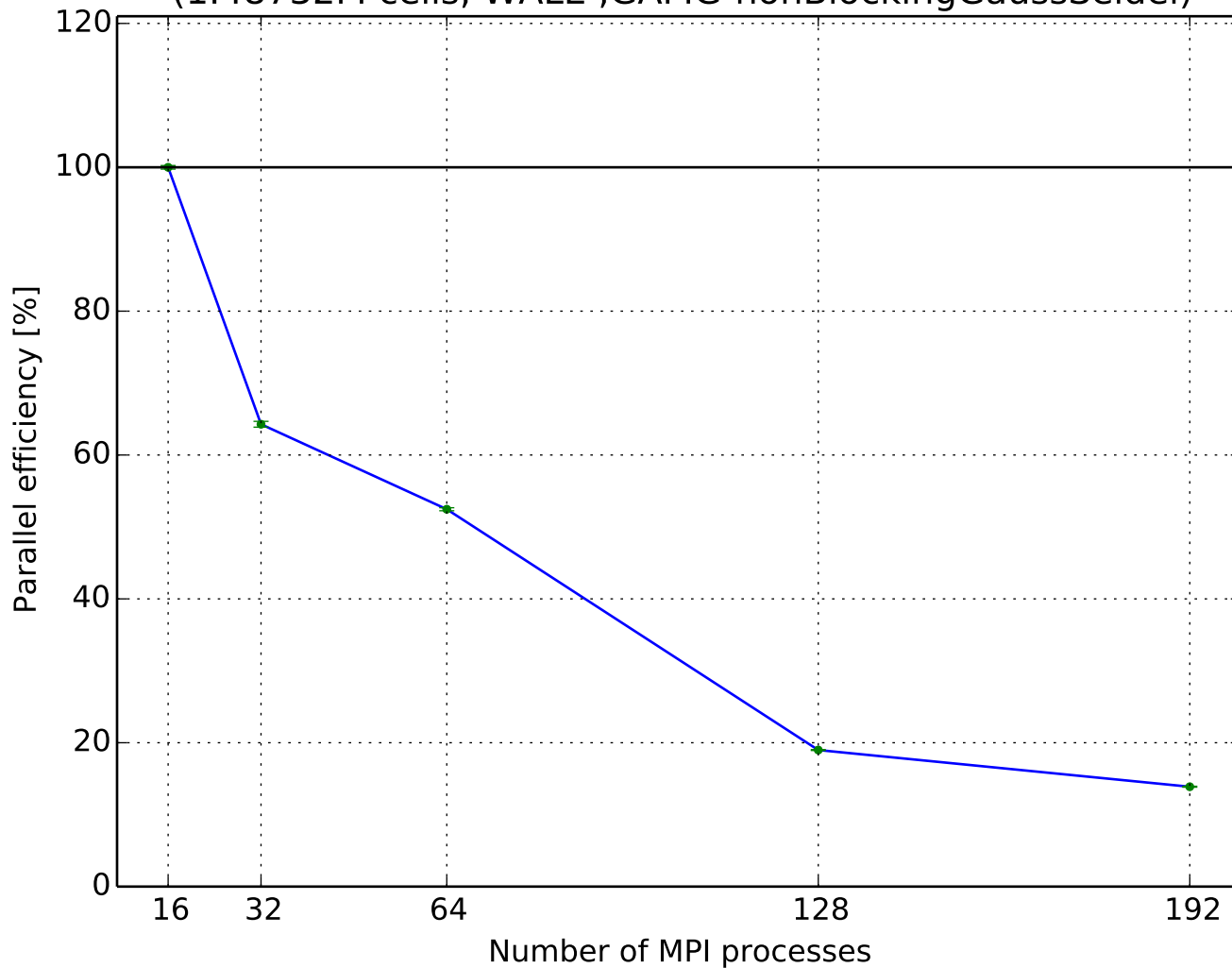
Execution time per time step
(1.48732M cells, WALE ,GAMG-nonBlockingGaussSeidel)



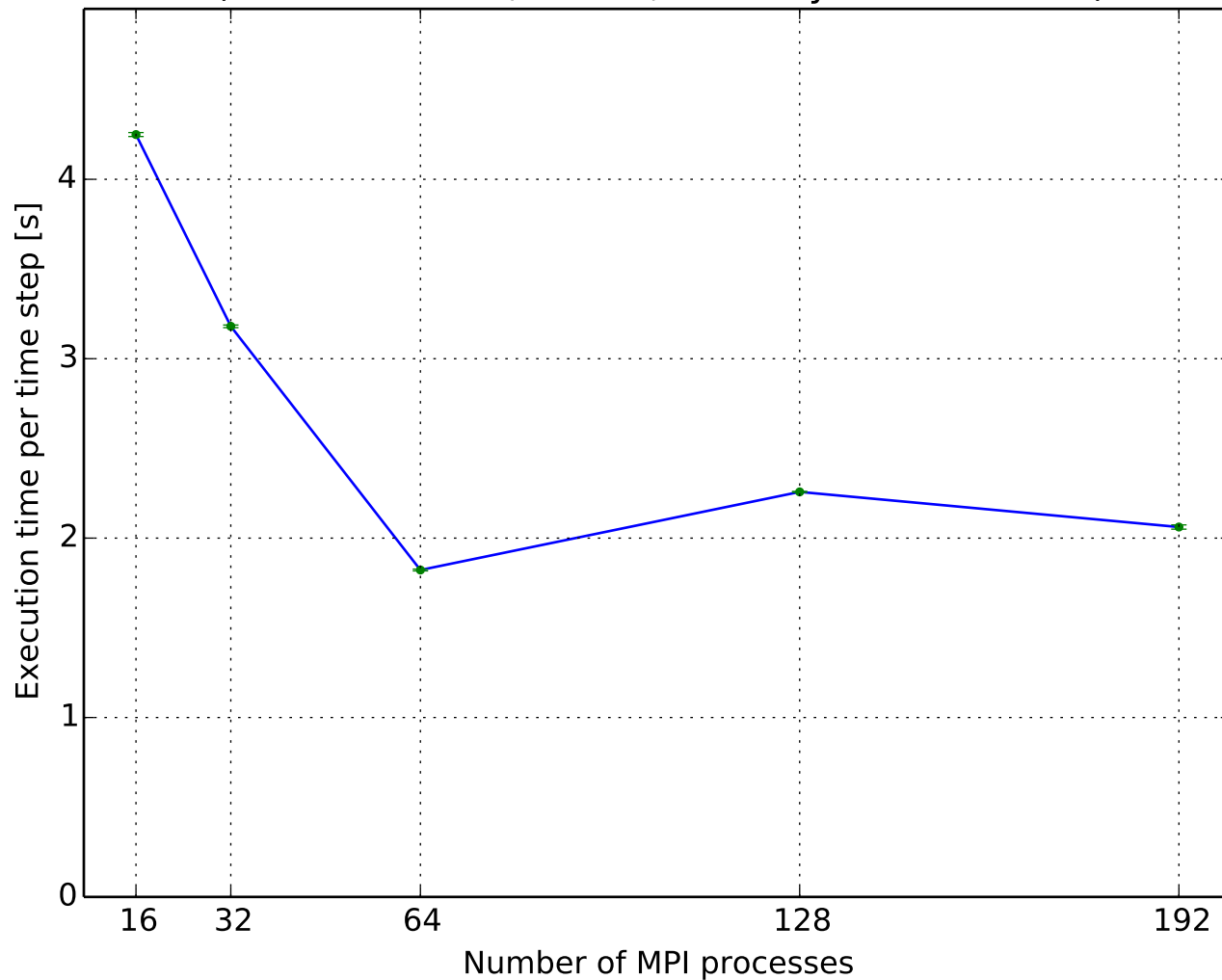
Speedup ratio
(1.48732M cells, WALE ,GAMG-nonBlockingGaussSeidel)



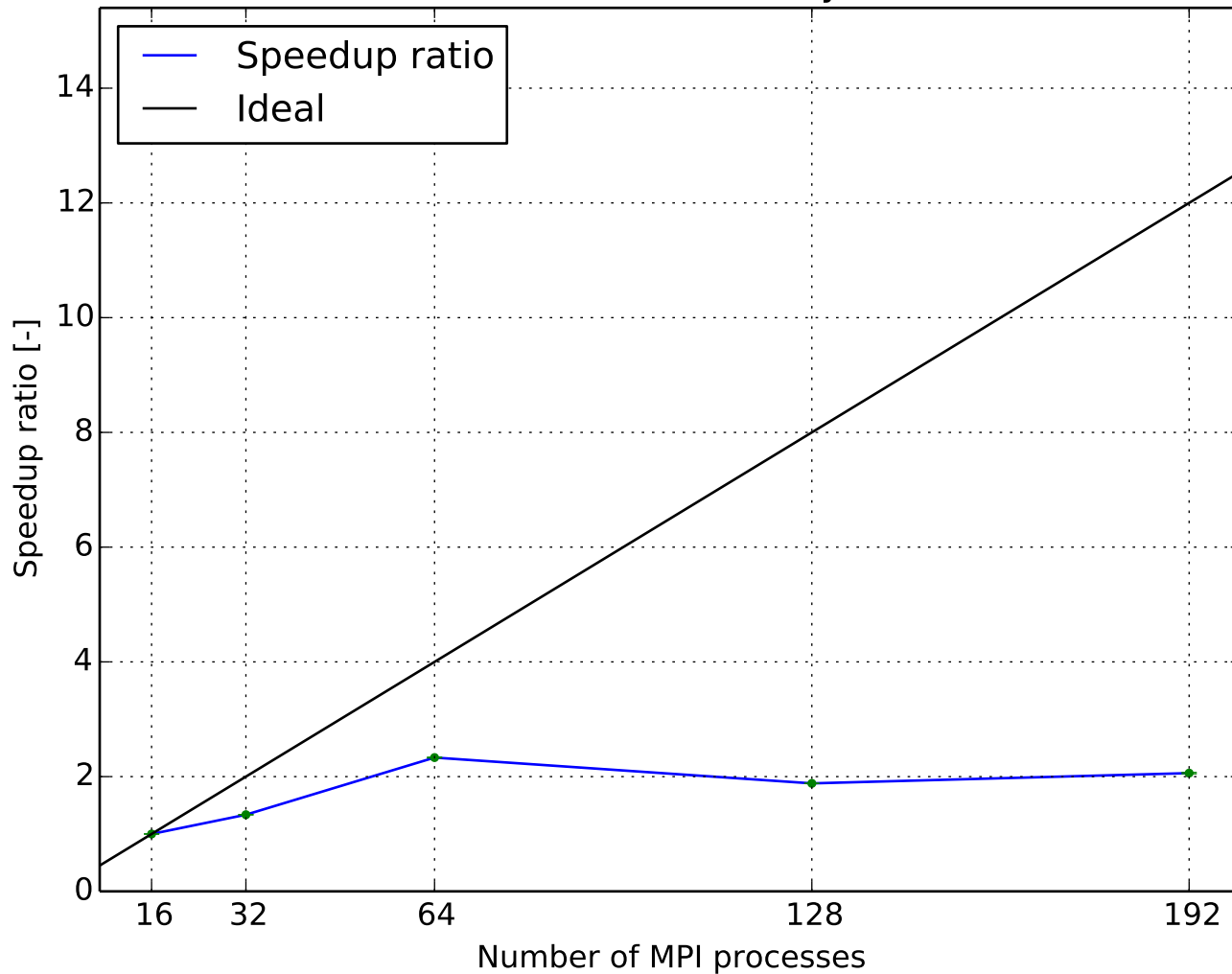
Parallel efficiency
(1.48732M cells, WALE ,GAMG-nonBlockingGaussSeidel)



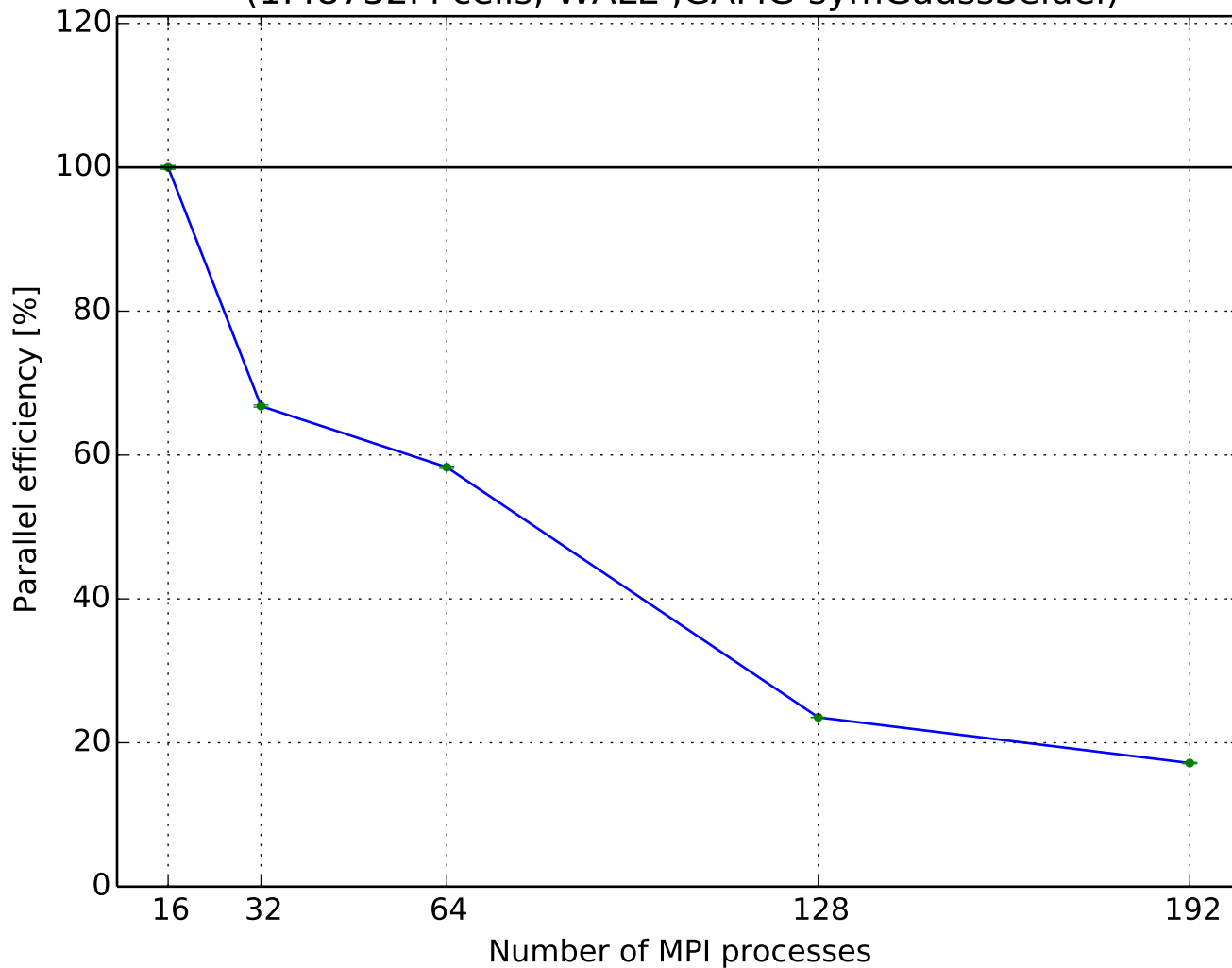
Execution time per time step
(1.48732M cells, WALE ,GAMG-symGaussSeidel)



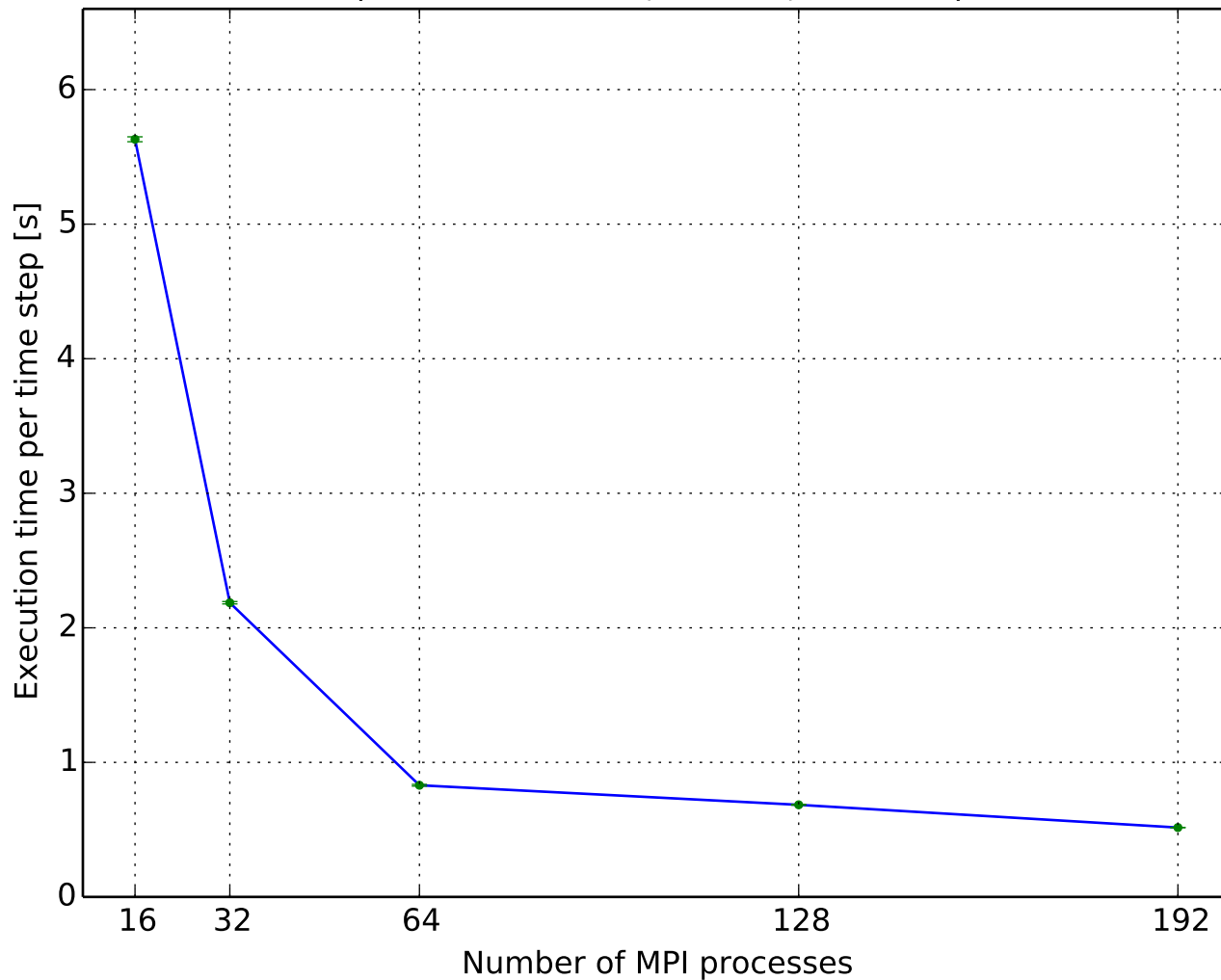
Speedup ratio
(1.48732M cells, WALE ,GAMG-symGaussSeidel)



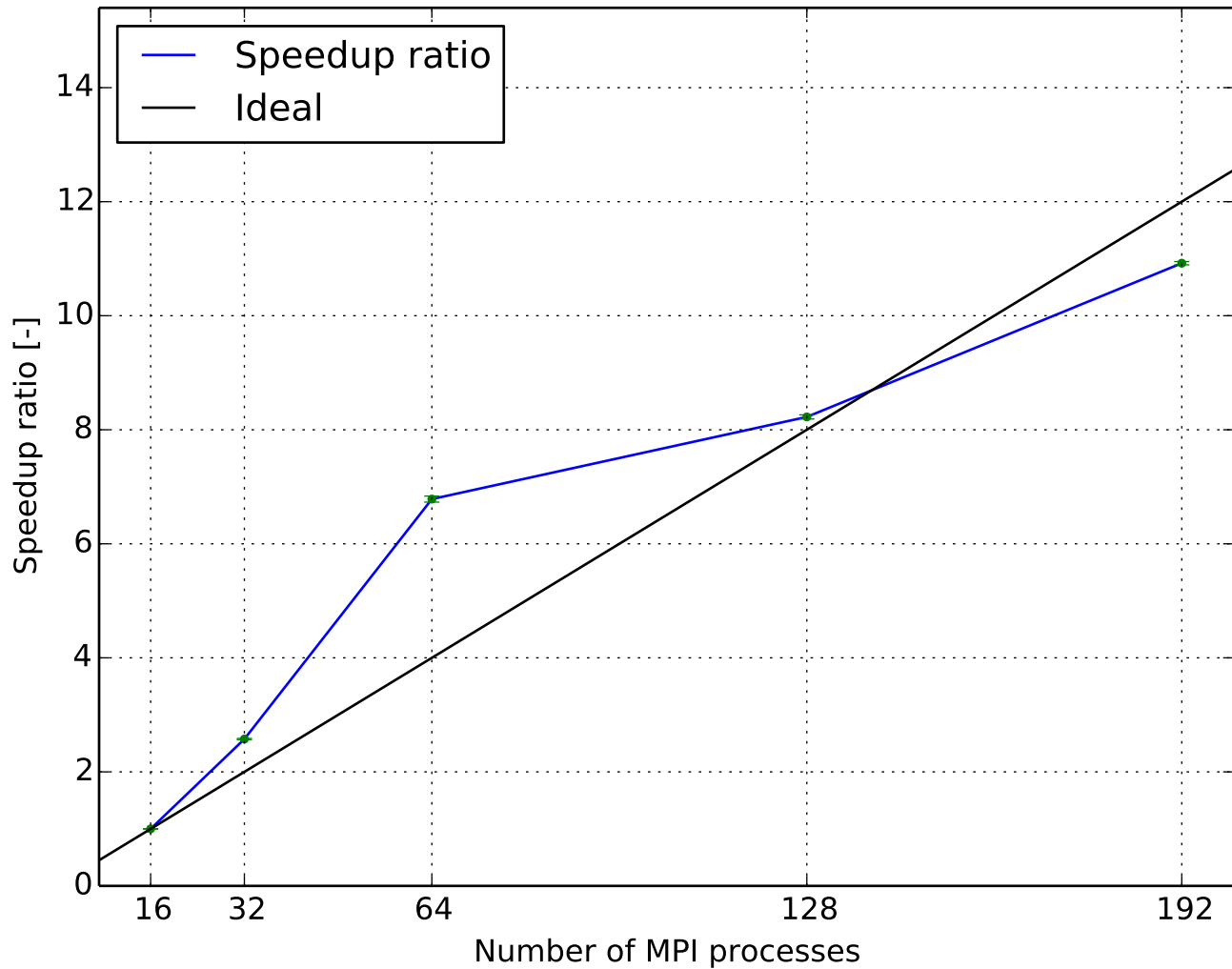
Parallel efficiency
(1.48732M cells, WALE ,GAMG-symGaussSeidel)



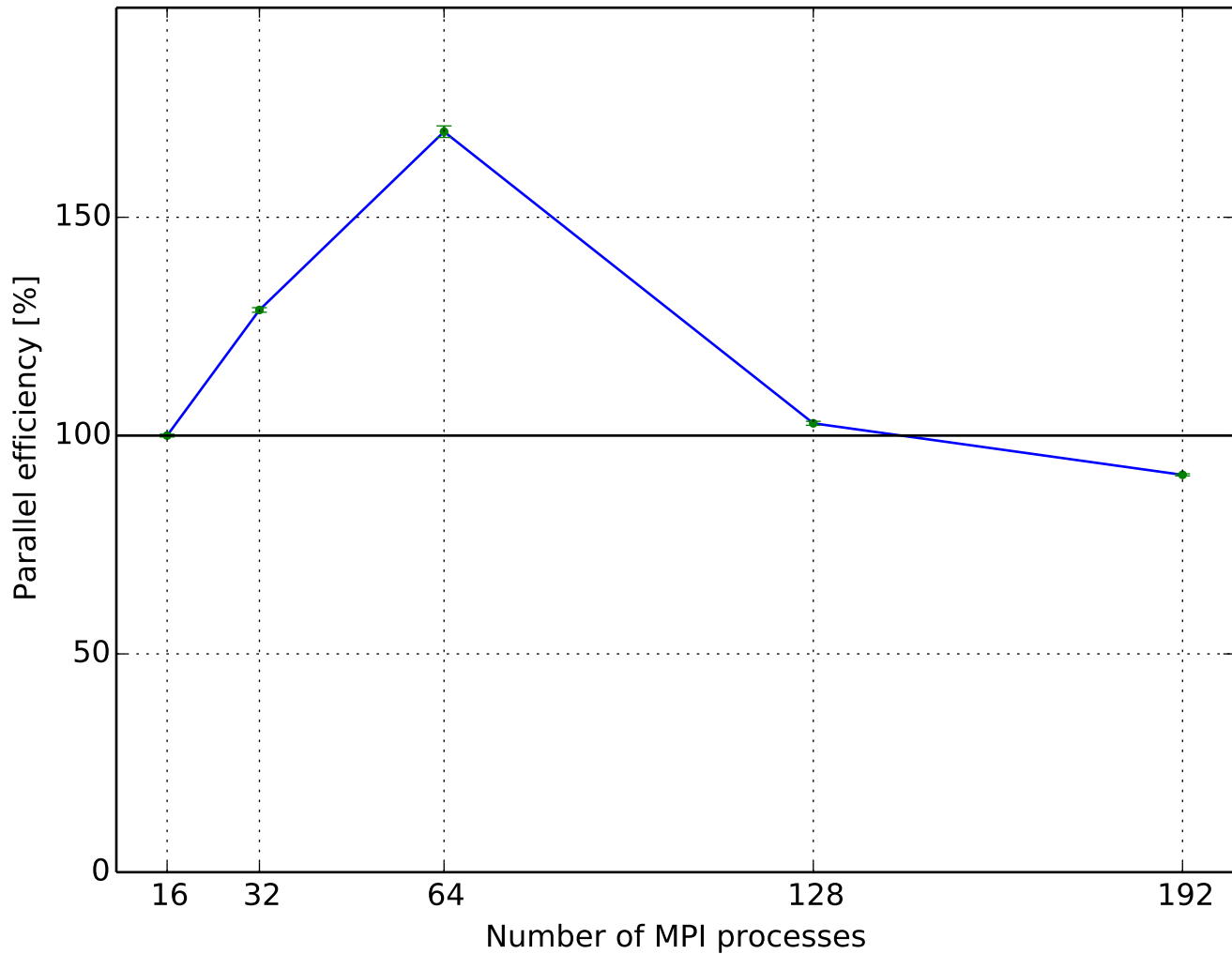
Execution time per time step
(1.48732M cells, WALE ,PCG-DIC)



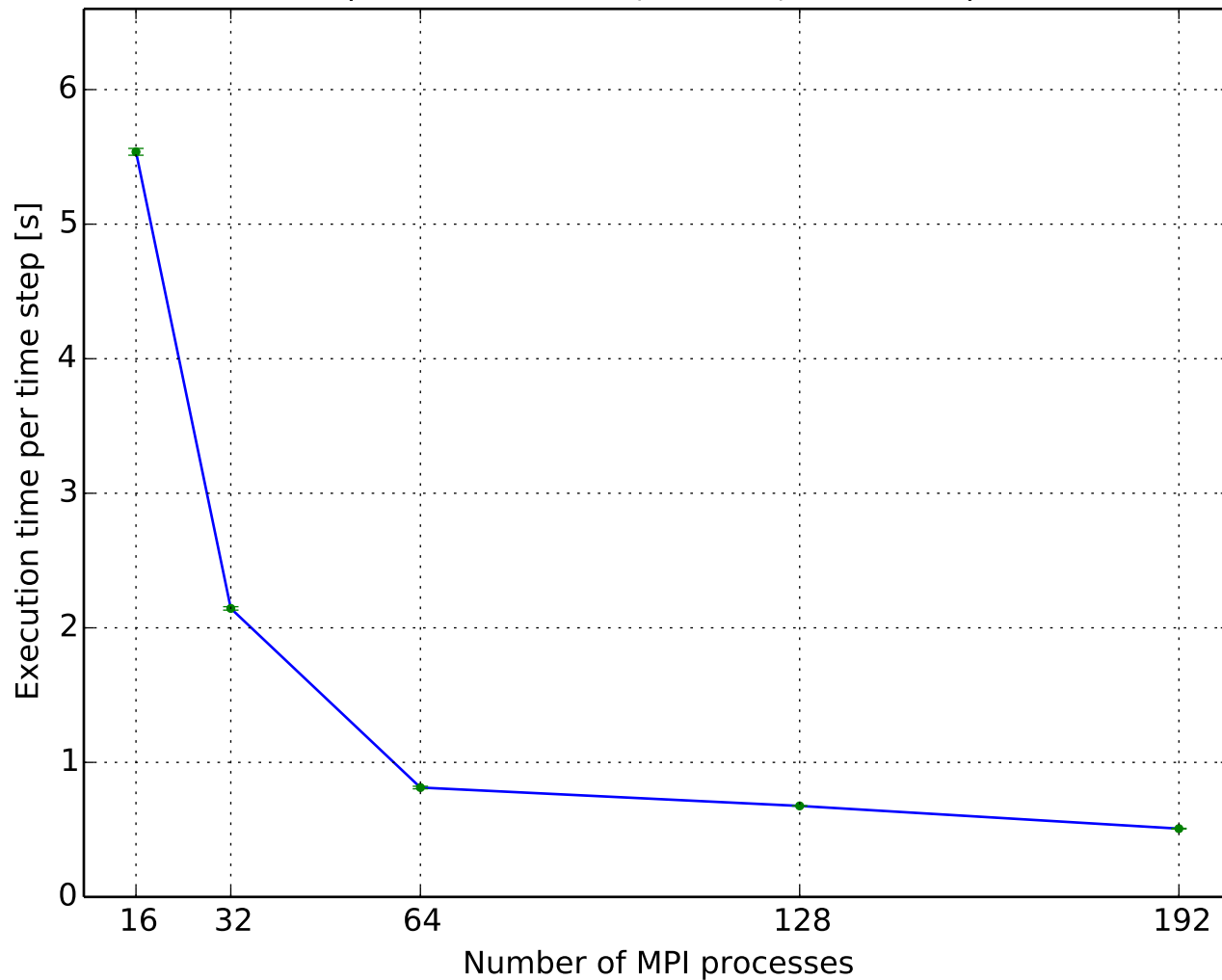
Speedup ratio
(1.48732M cells, WALE ,PCG-DIC)



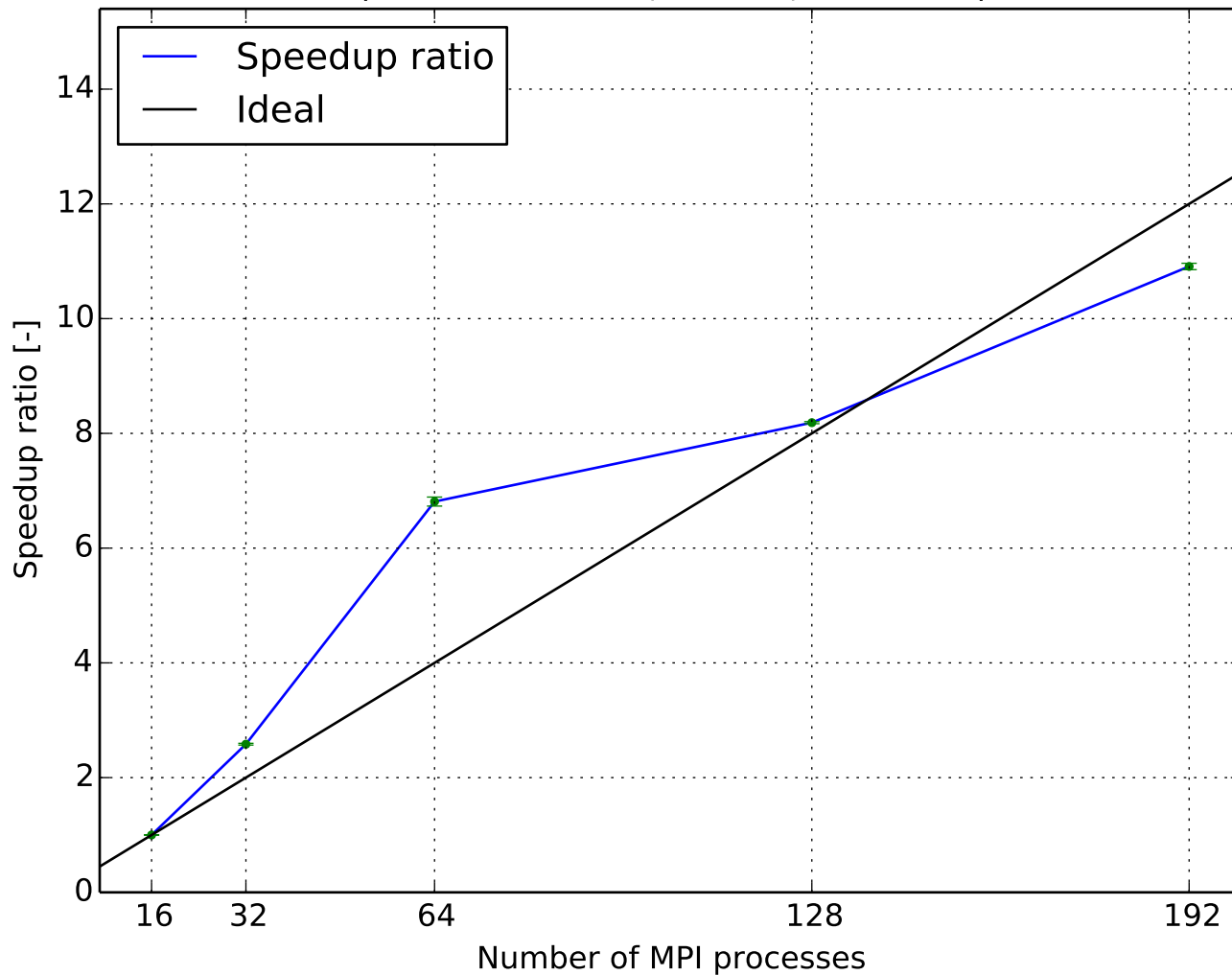
Parallel efficiency
(1.48732M cells, WALE ,PCG-DIC)



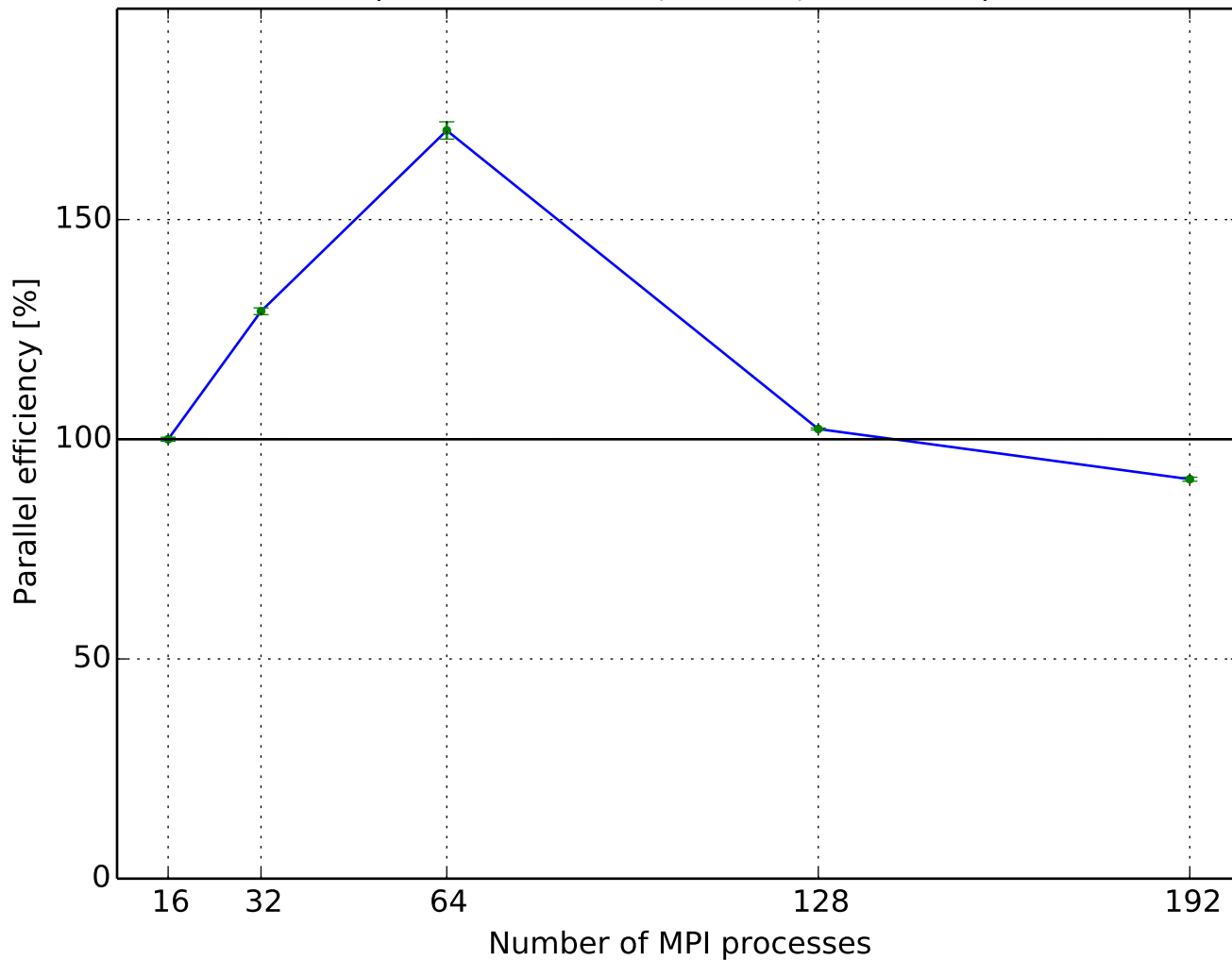
Execution time per time step
(1.48732M cells, WALE ,PCG-FDIC)



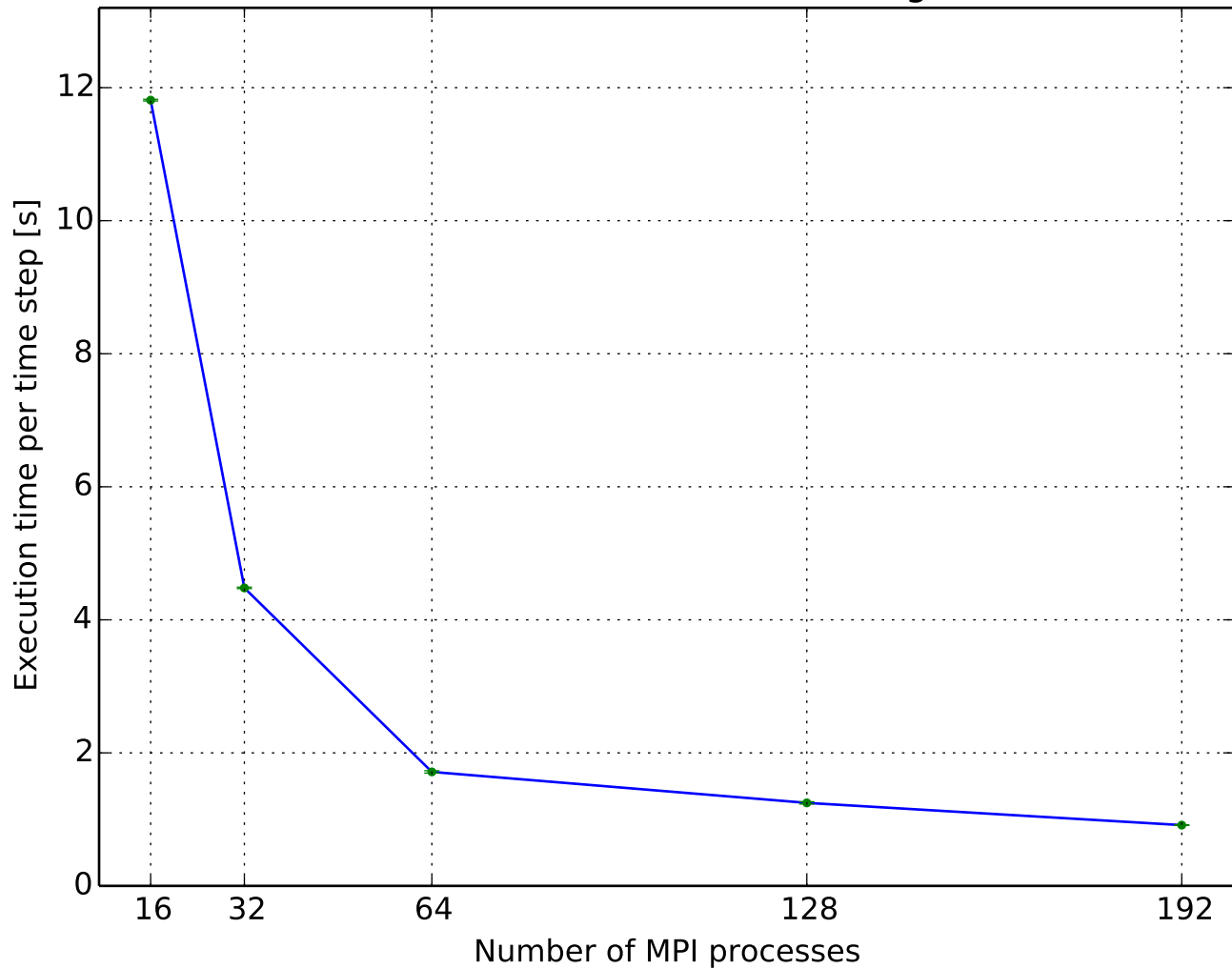
Speedup ratio
(1.48732M cells, WALE ,PCG-FDIC)



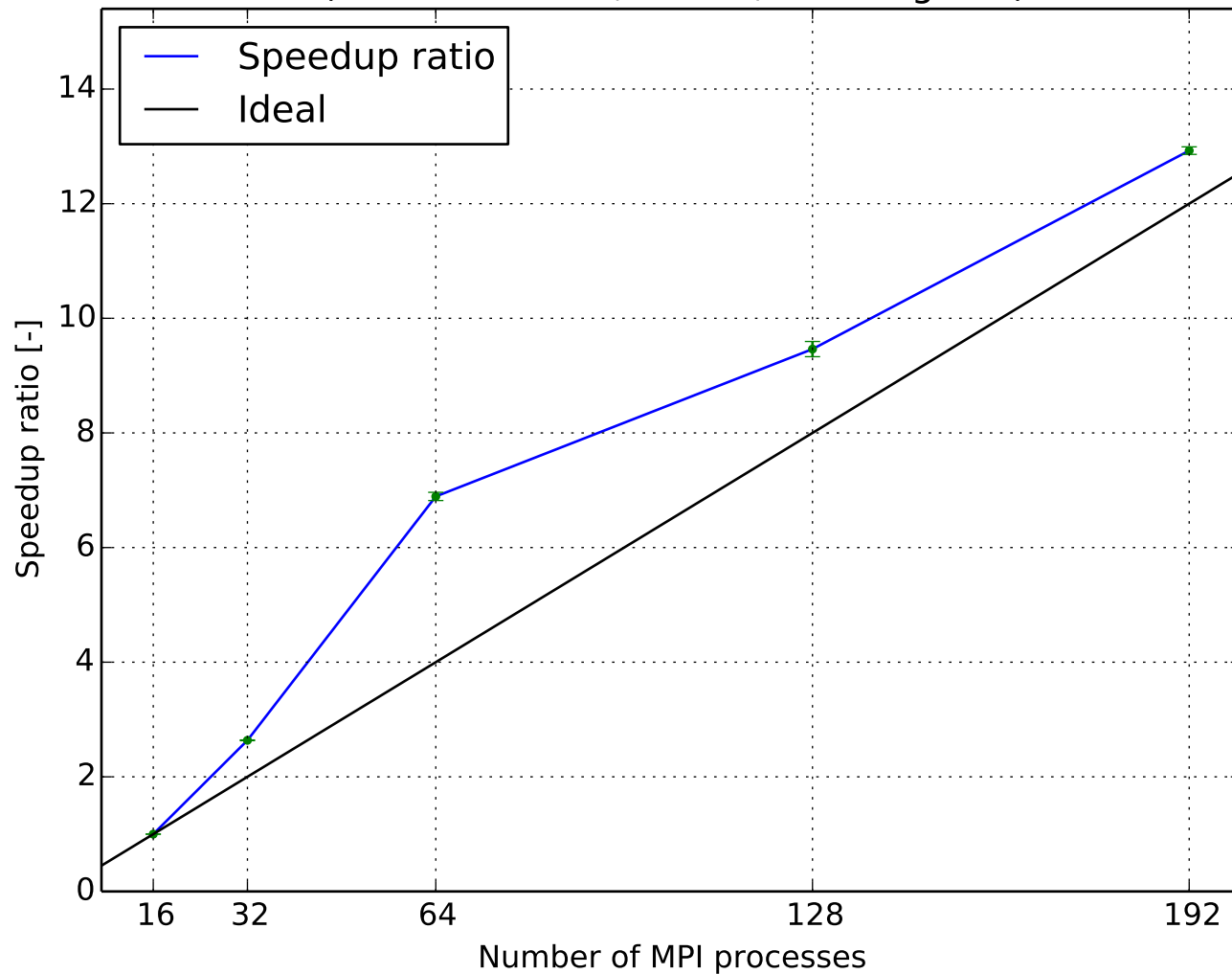
Parallel efficiency
(1.48732M cells, WALE ,PCG-FDIC)



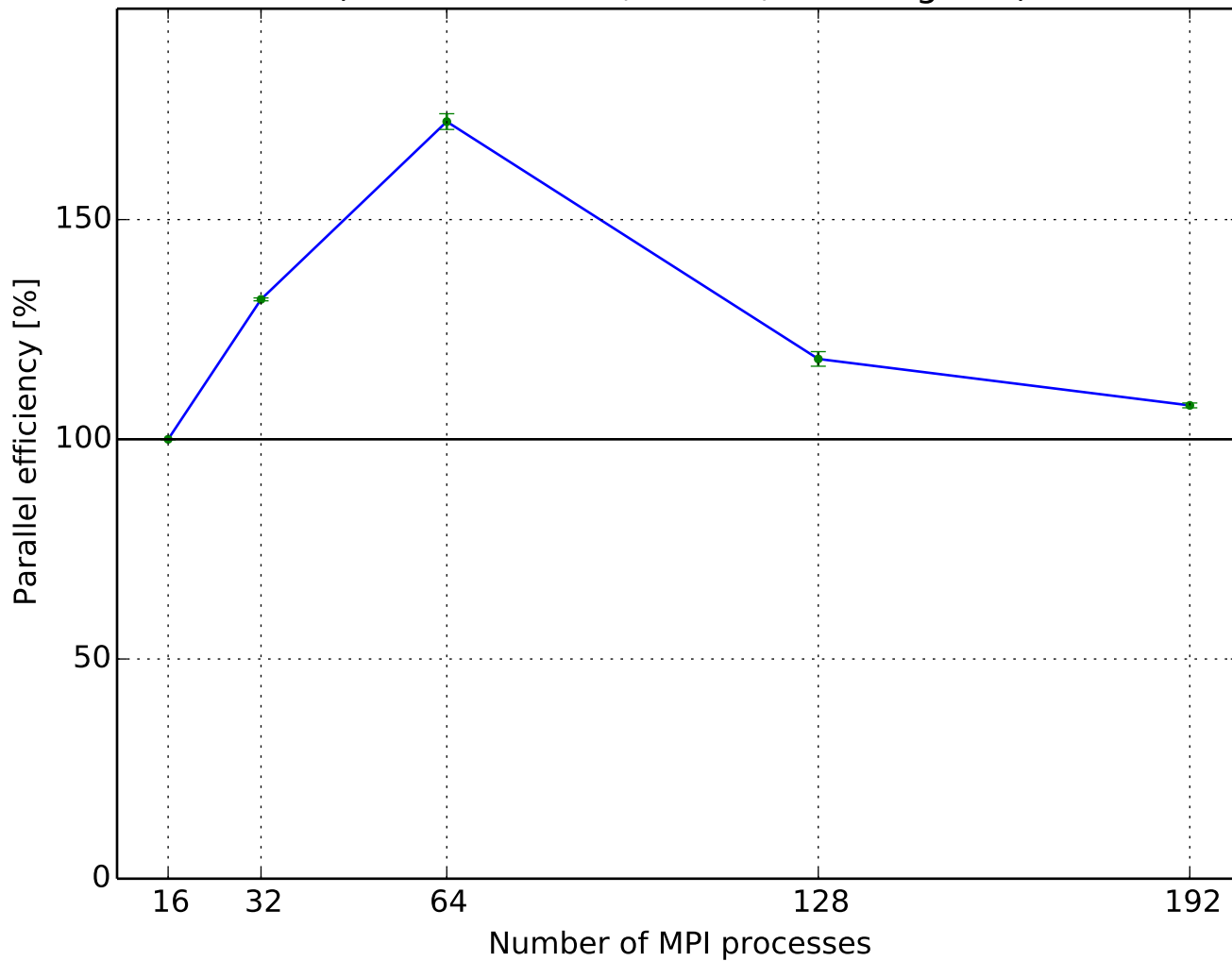
Execution time per time step
(1.48732M cells, WALE ,PCG-diagonal)



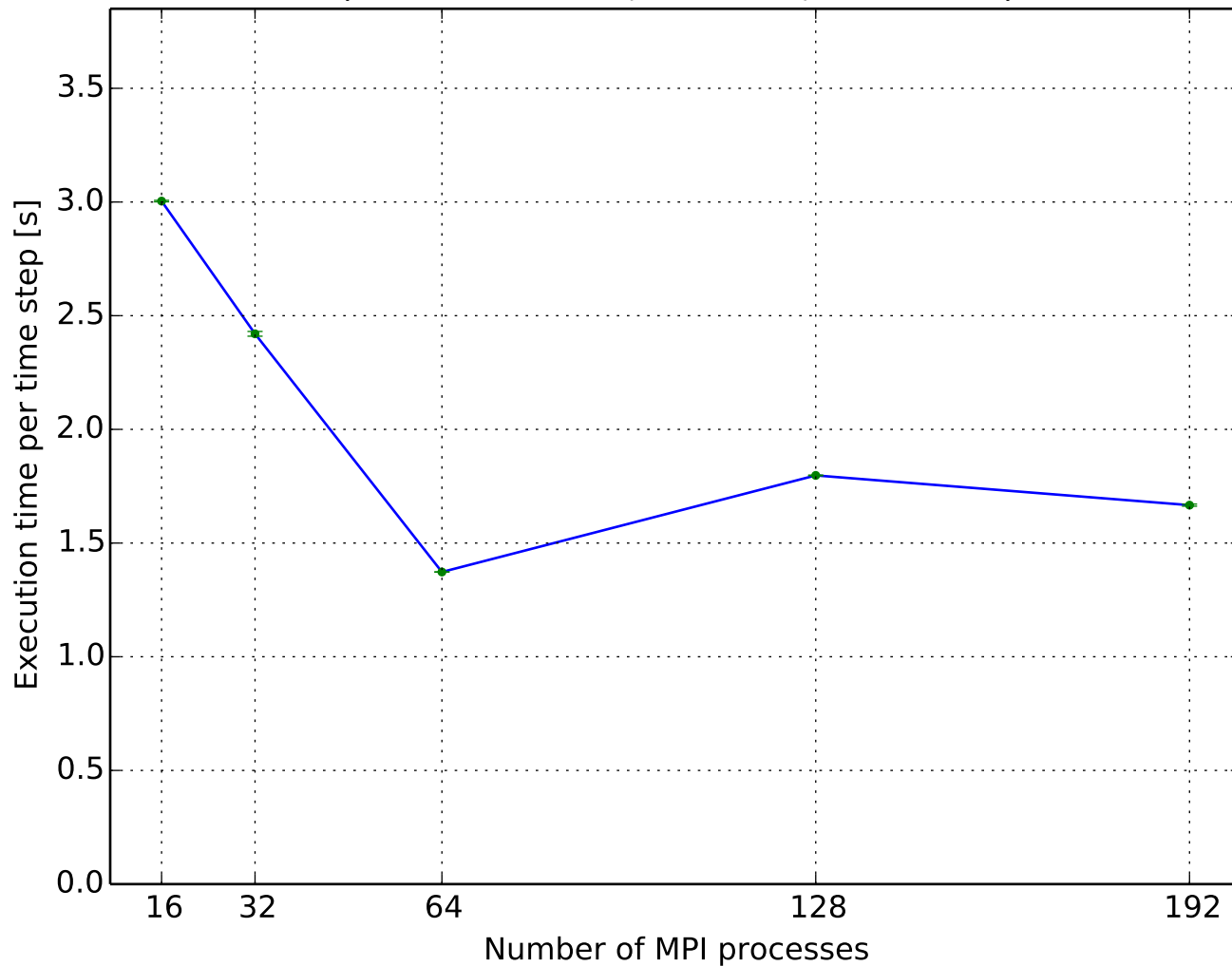
Speedup ratio
(1.48732M cells, WALE ,PCG-diagonal)



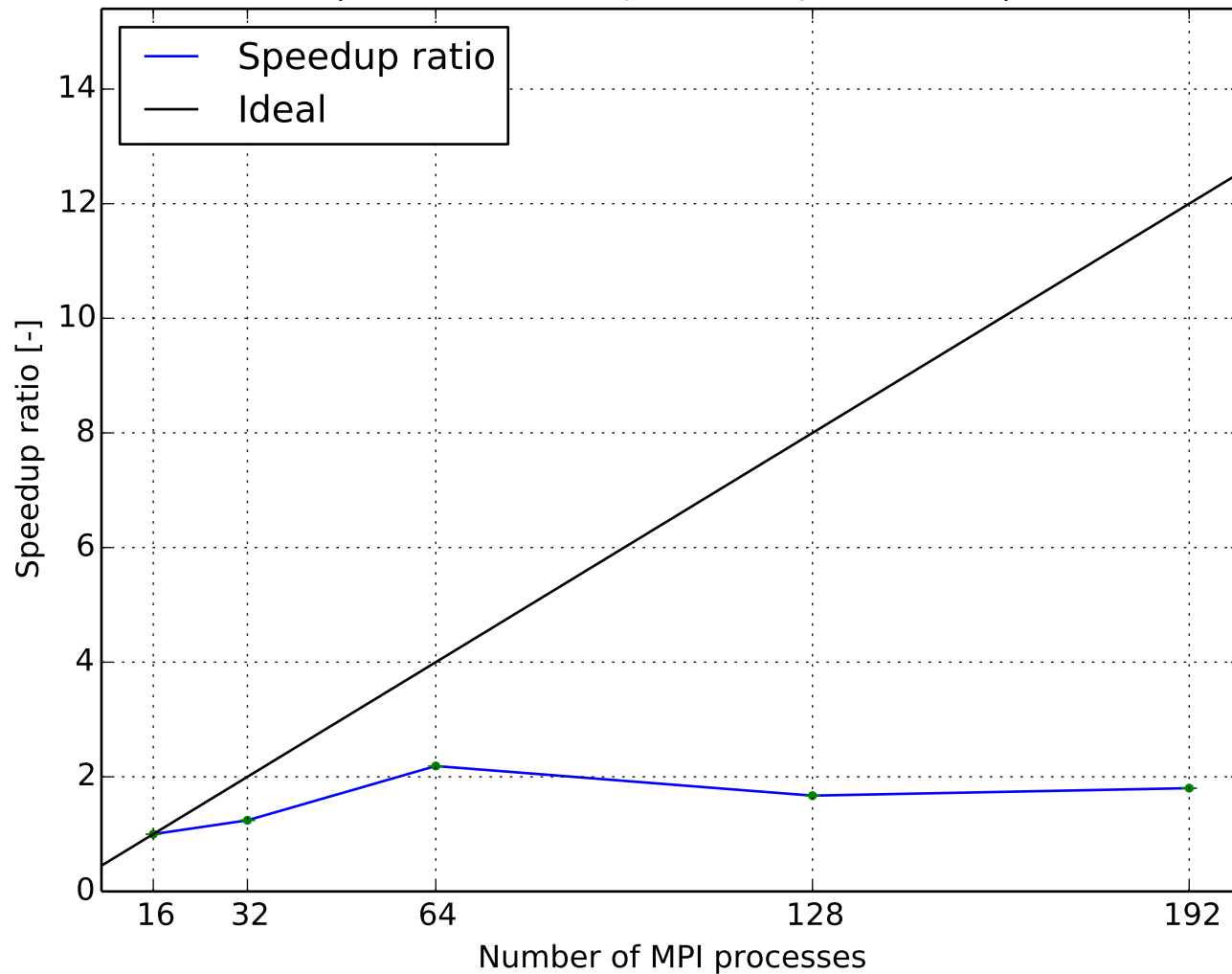
Parallel efficiency
(1.48732M cells, WALE ,PCG-diagonal)



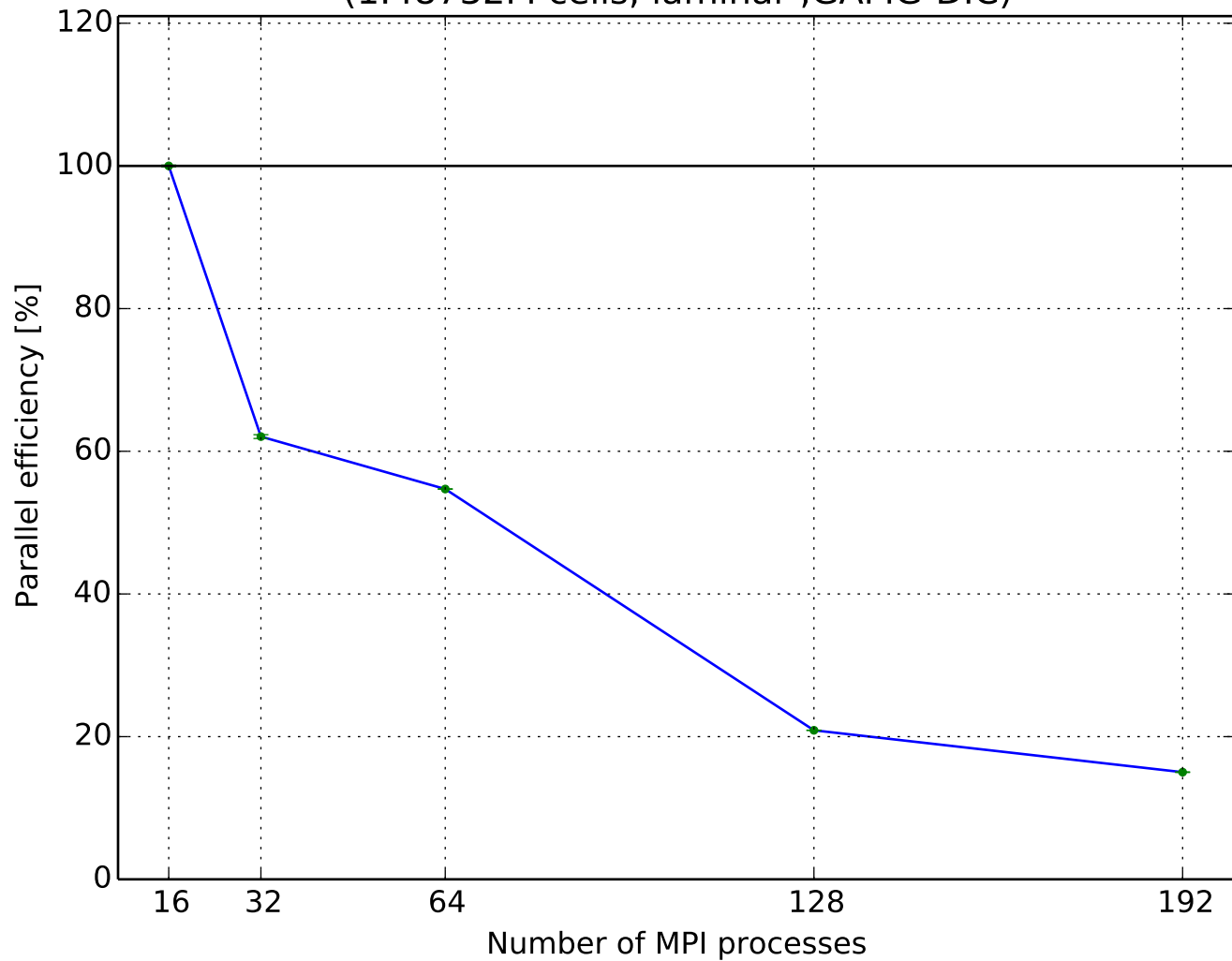
Execution time per time step
(1.48732M cells, laminar ,GAMG-DIC)



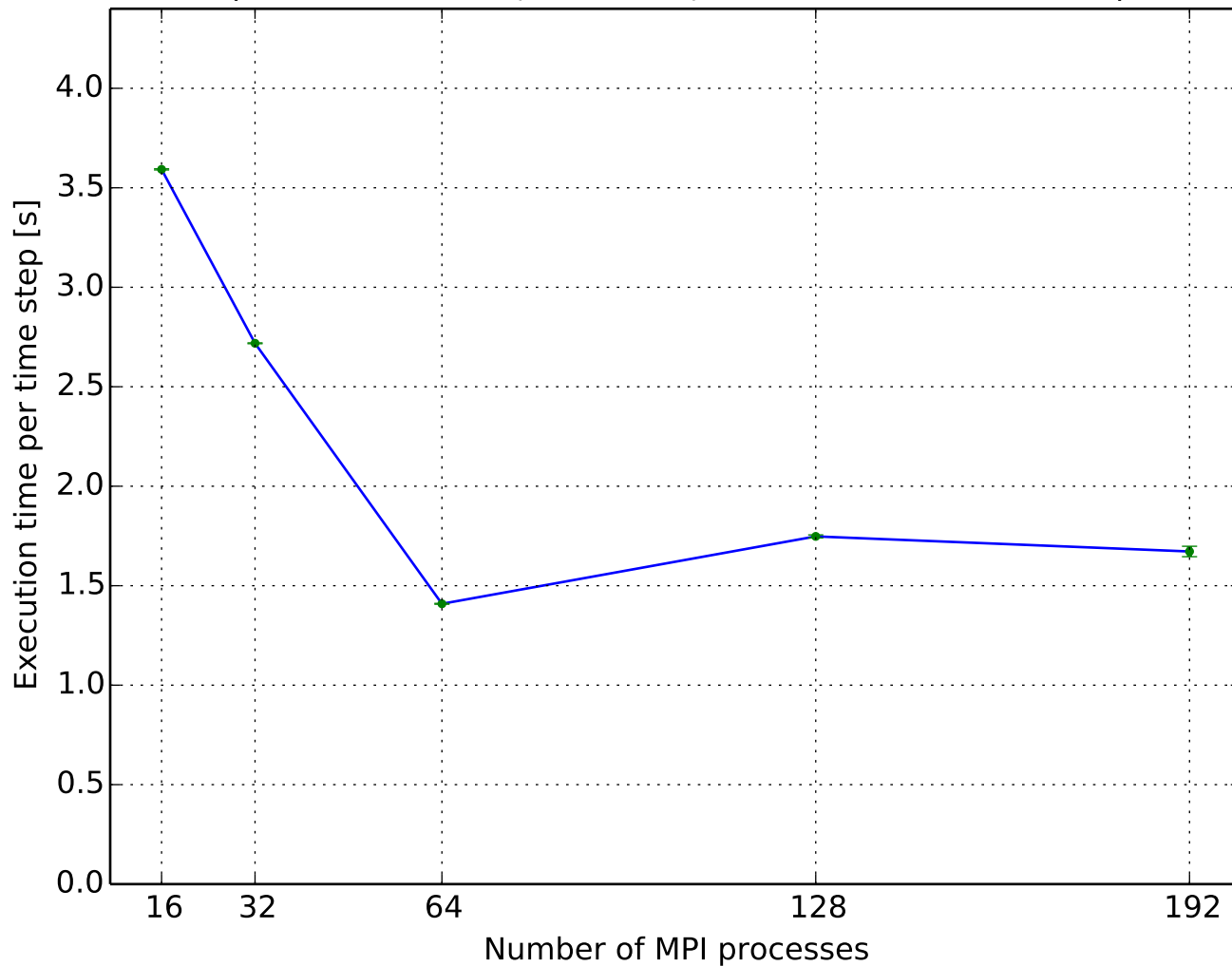
Speedup ratio
(1.48732M cells, laminar ,GAMG-DIC)



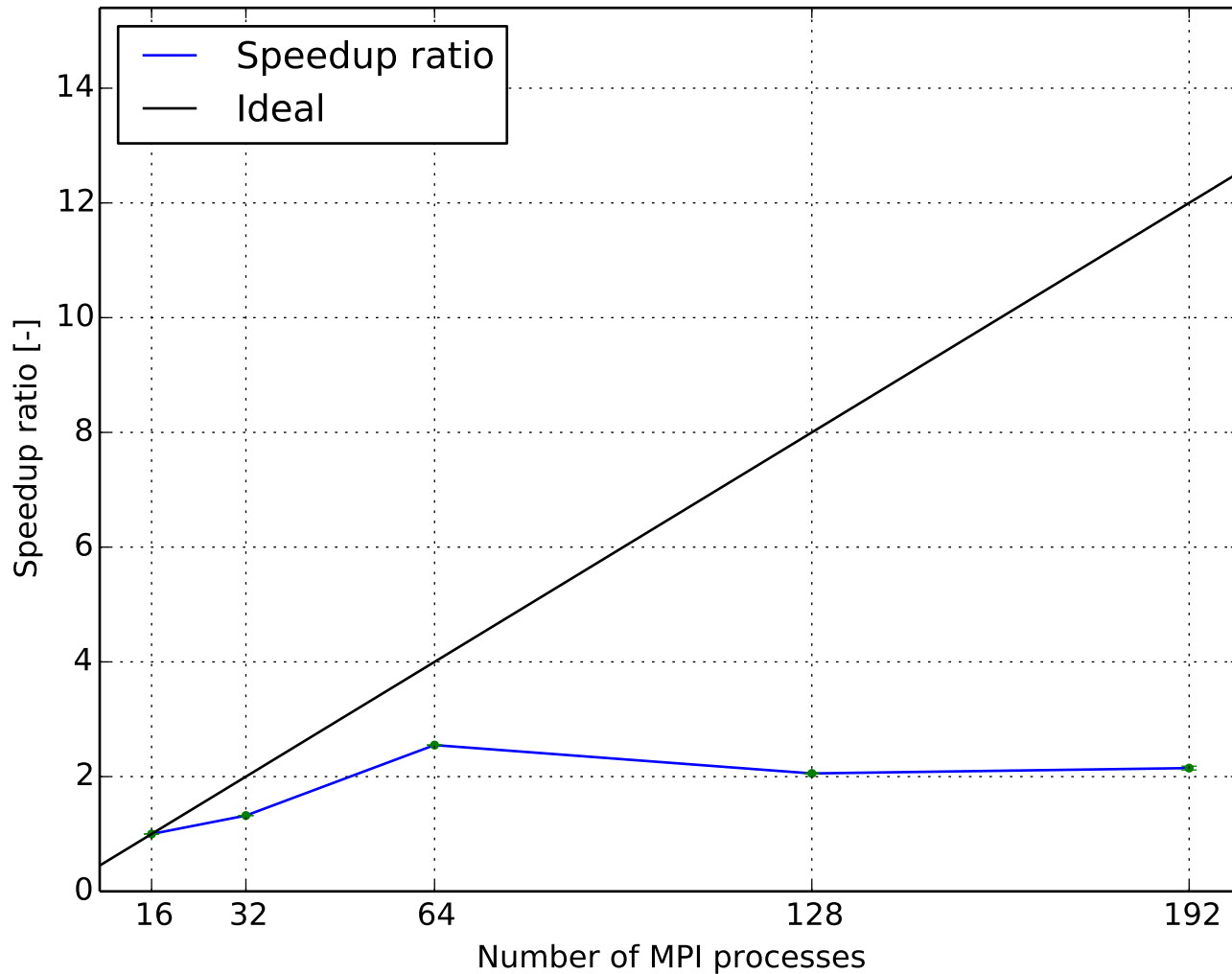
Parallel efficiency
(1.48732M cells, laminar ,GAMG-DIC)



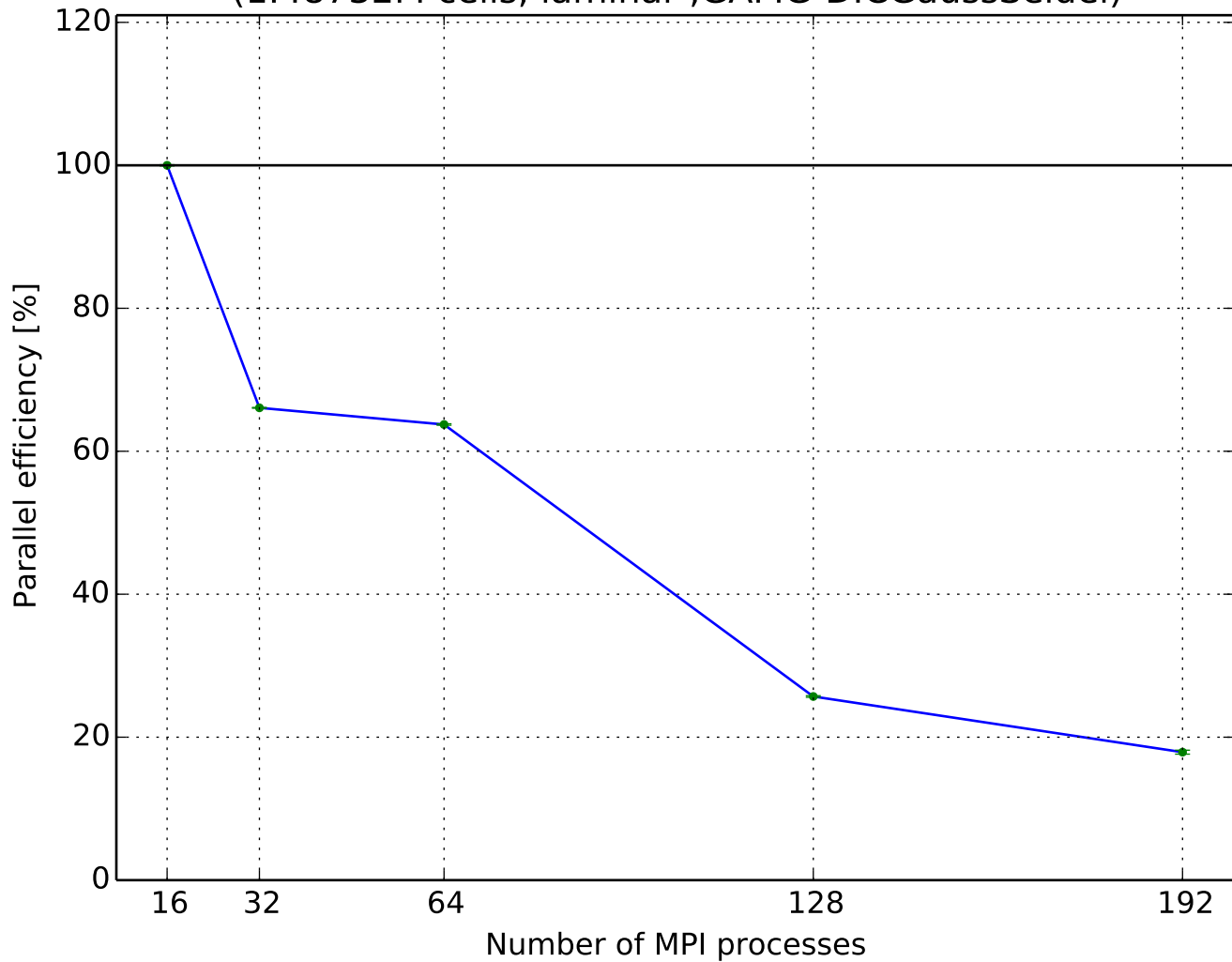
Execution time per time step
(1.48732M cells, laminar ,GAMG-DICGaussSeidel)



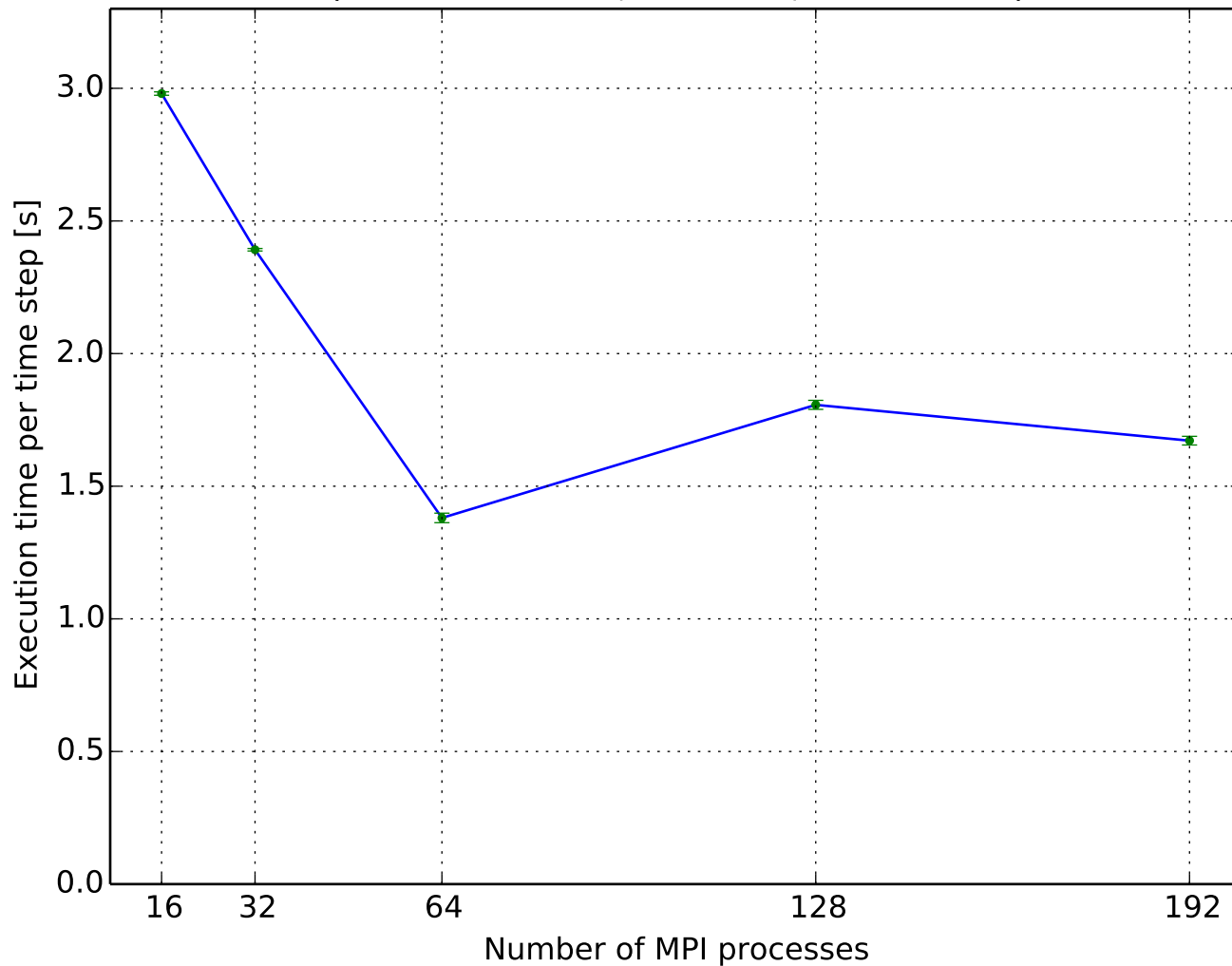
Speedup ratio
(1.48732M cells, laminar ,GAMG-DICGaussSeidel)



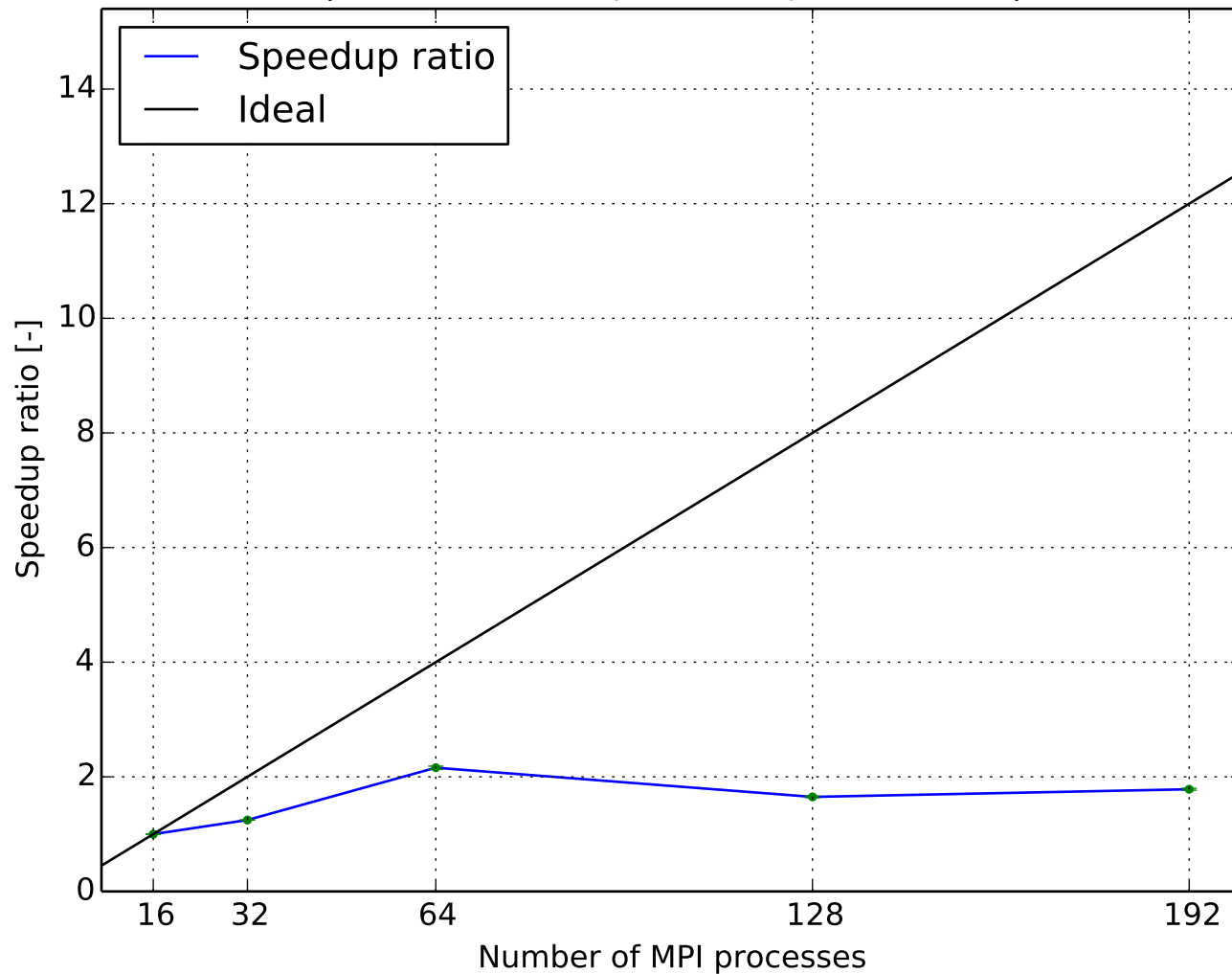
Parallel efficiency
(1.48732M cells, laminar ,GAMG-DICGaussSeidel)



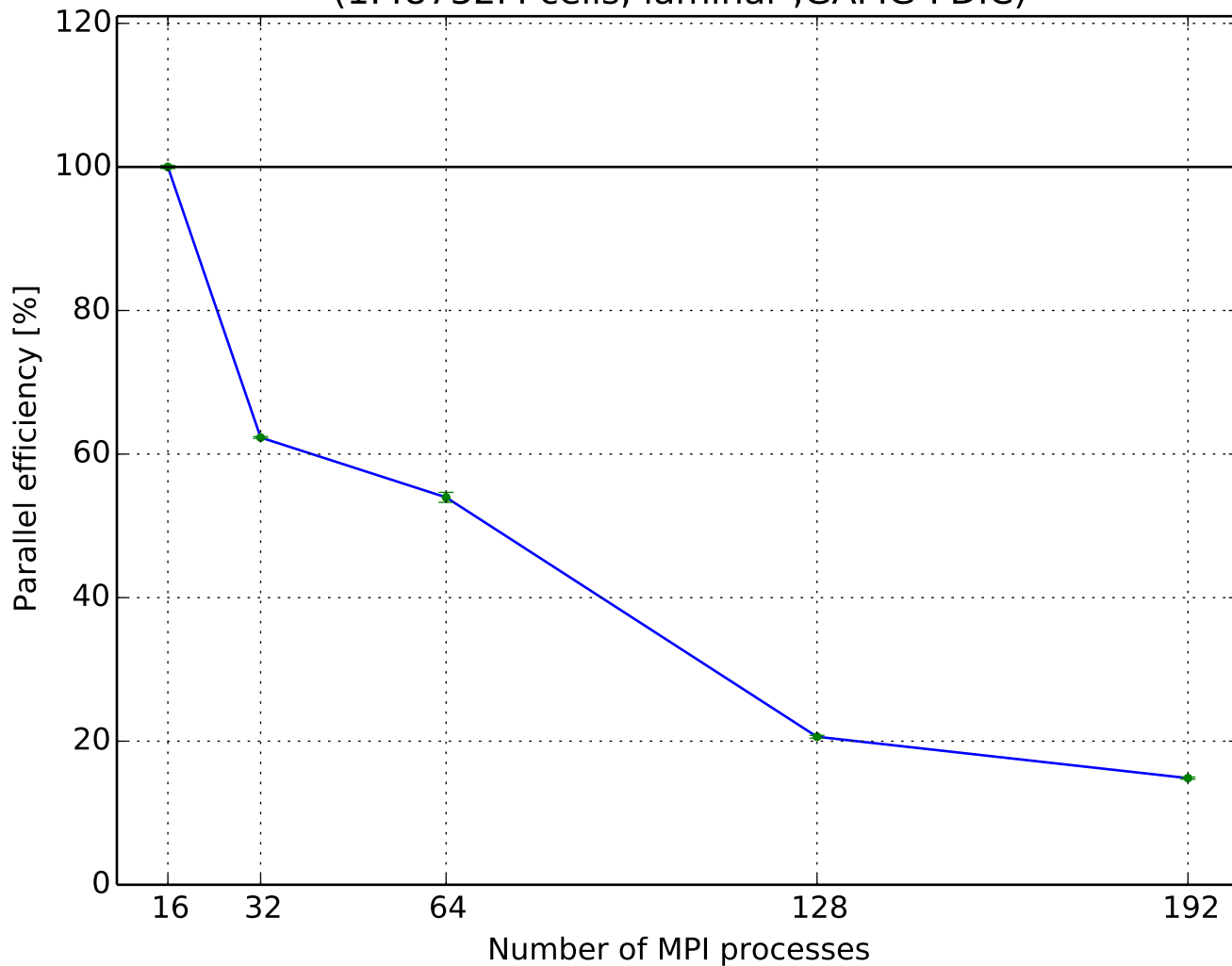
Execution time per time step
(1.48732M cells, laminar ,GAMG-FDIC)



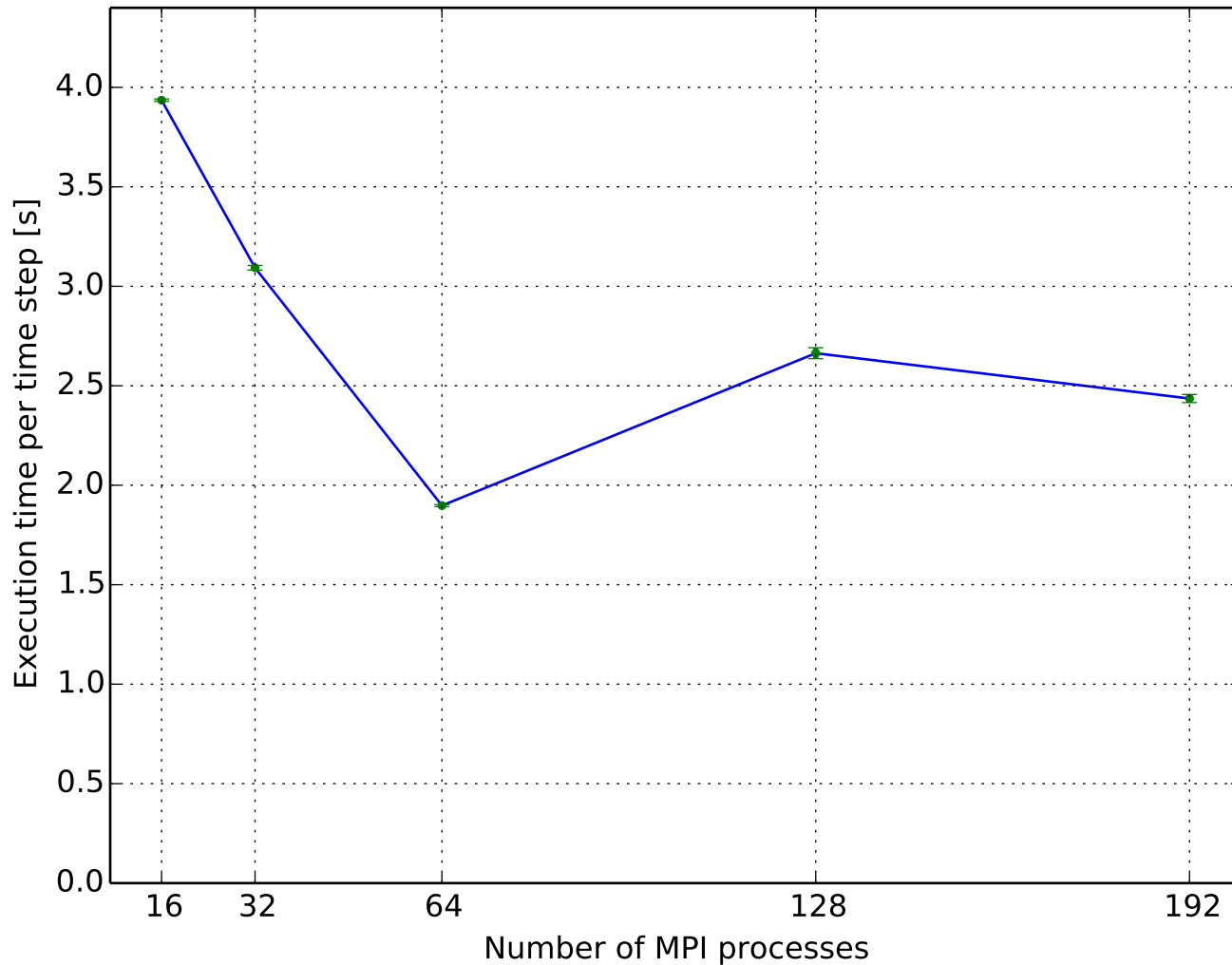
Speedup ratio
(1.48732M cells, laminar ,GAMG-FDIC)



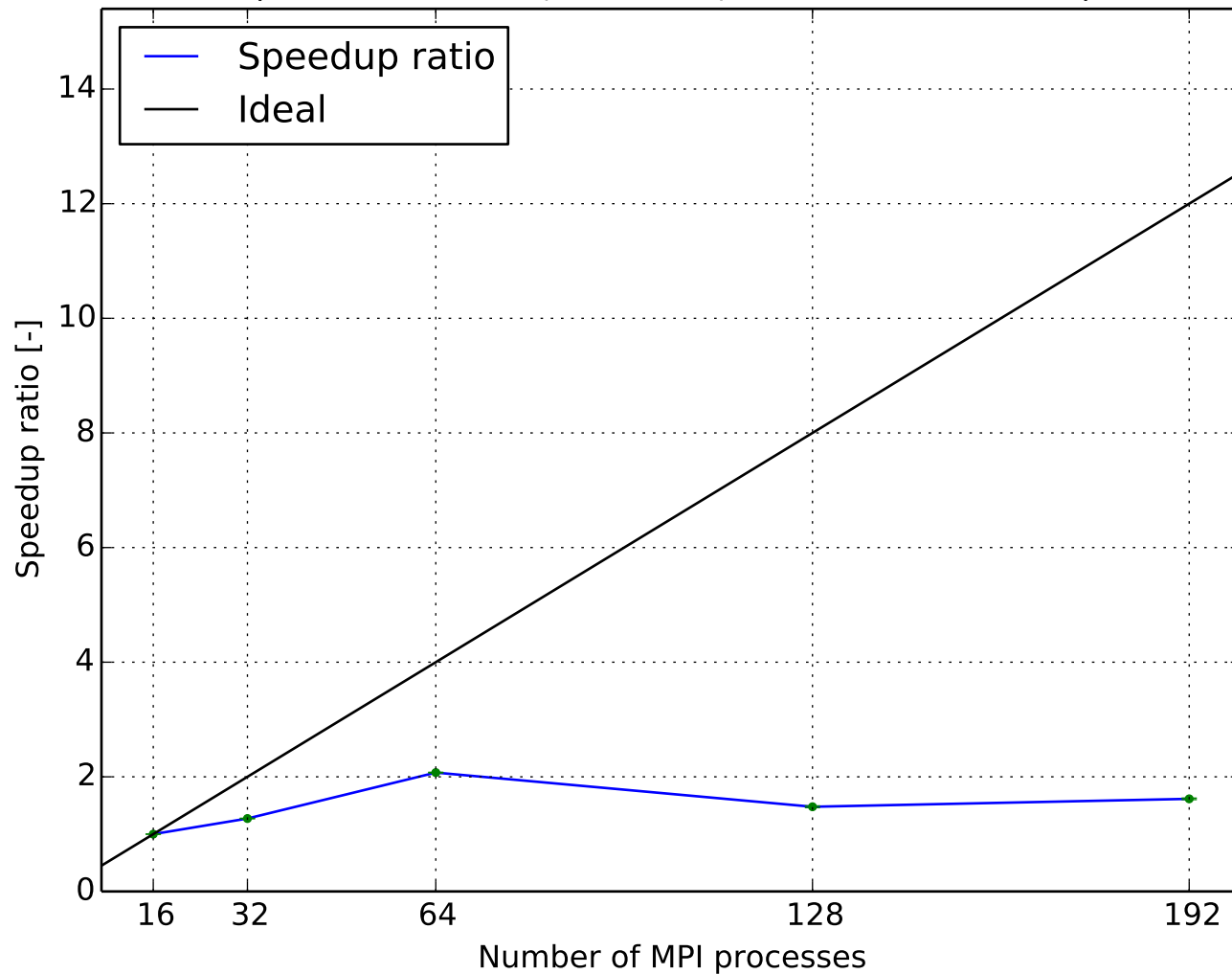
Parallel efficiency
(1.48732M cells, laminar ,GAMG-FDIC)



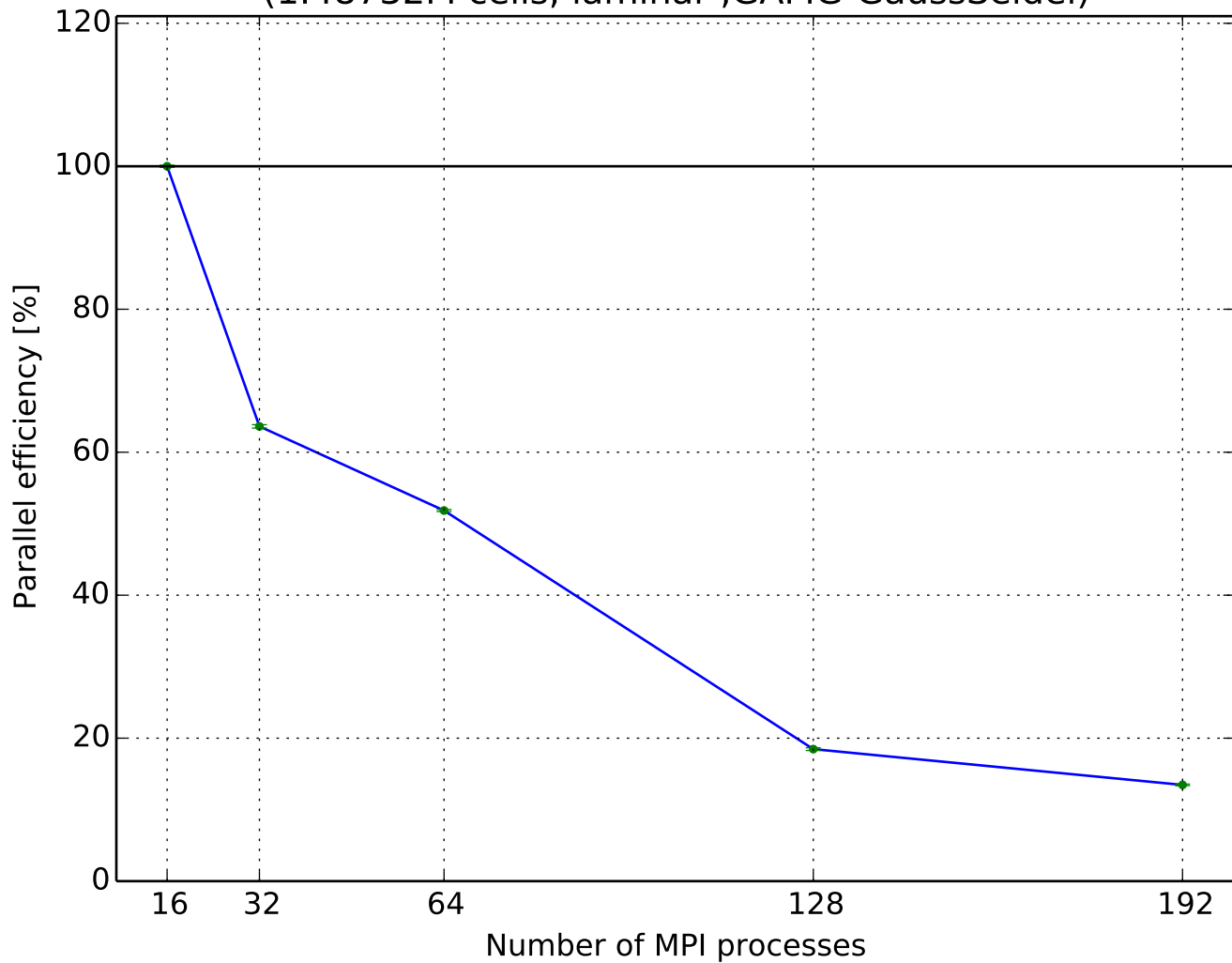
Execution time per time step
(1.48732M cells, laminar ,GAMG-GaussSeidel)



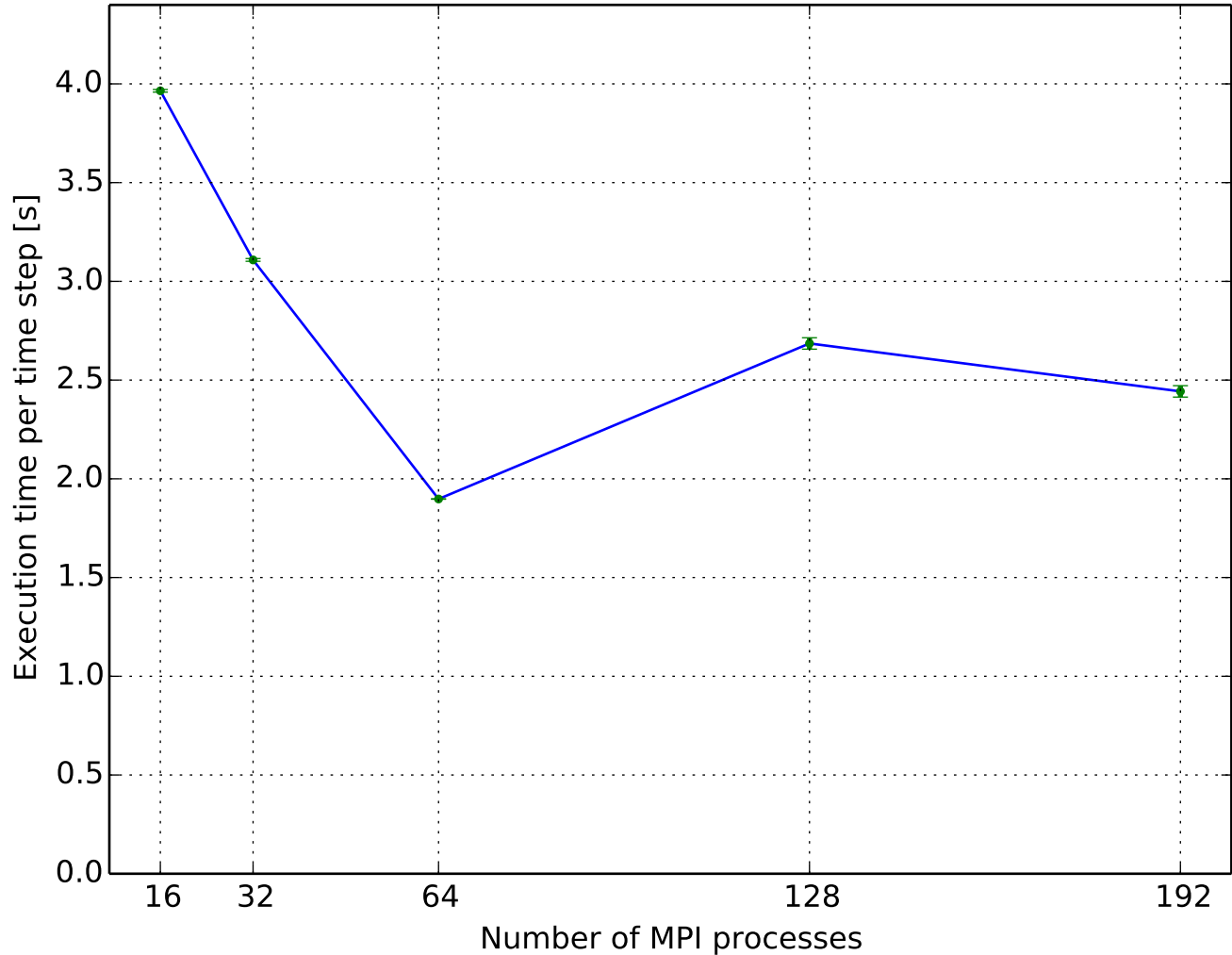
Speedup ratio
(1.48732M cells, laminar ,GAMG-GaussSeidel)



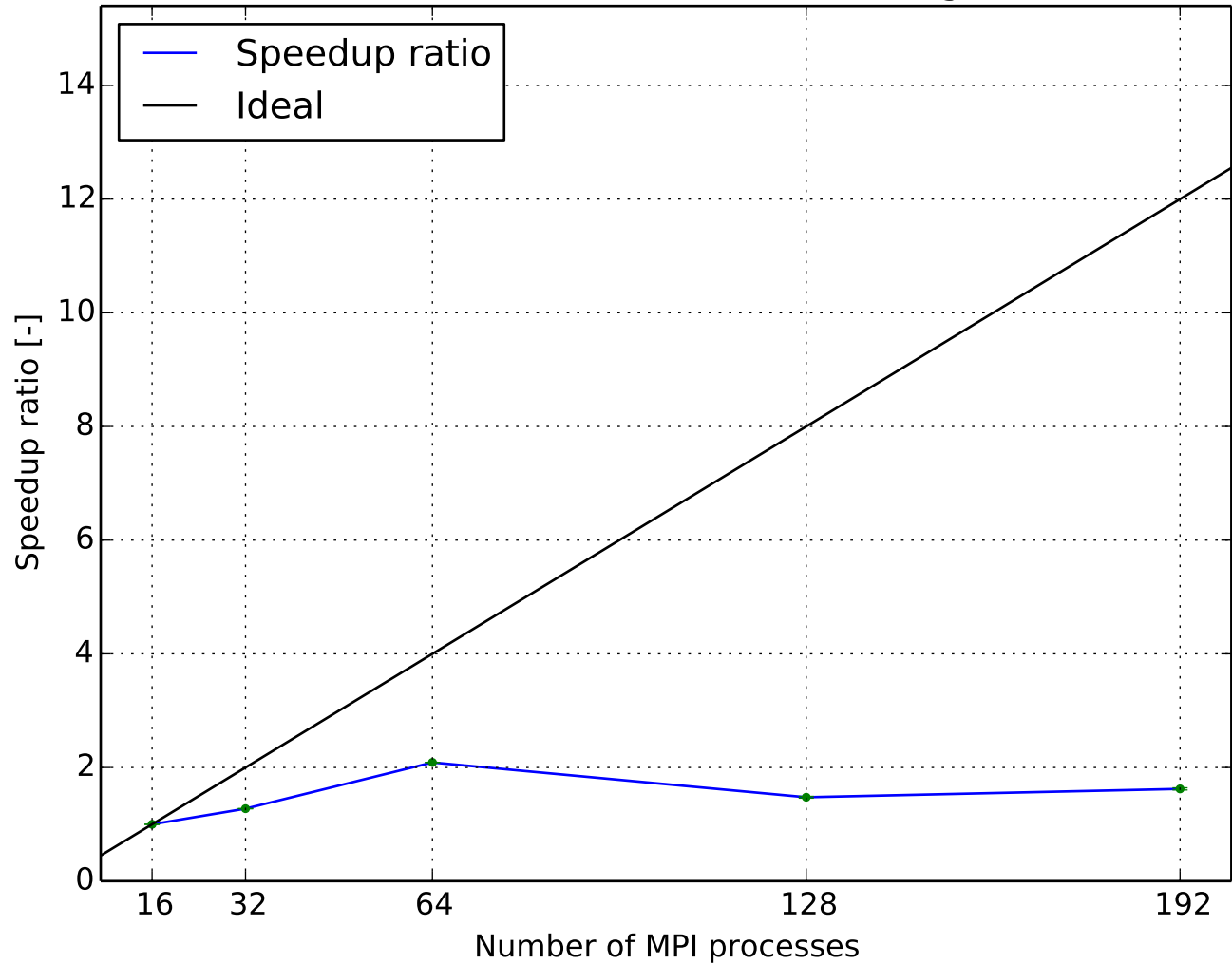
Parallel efficiency
(1.48732M cells, laminar ,GAMG-GaussSeidel)



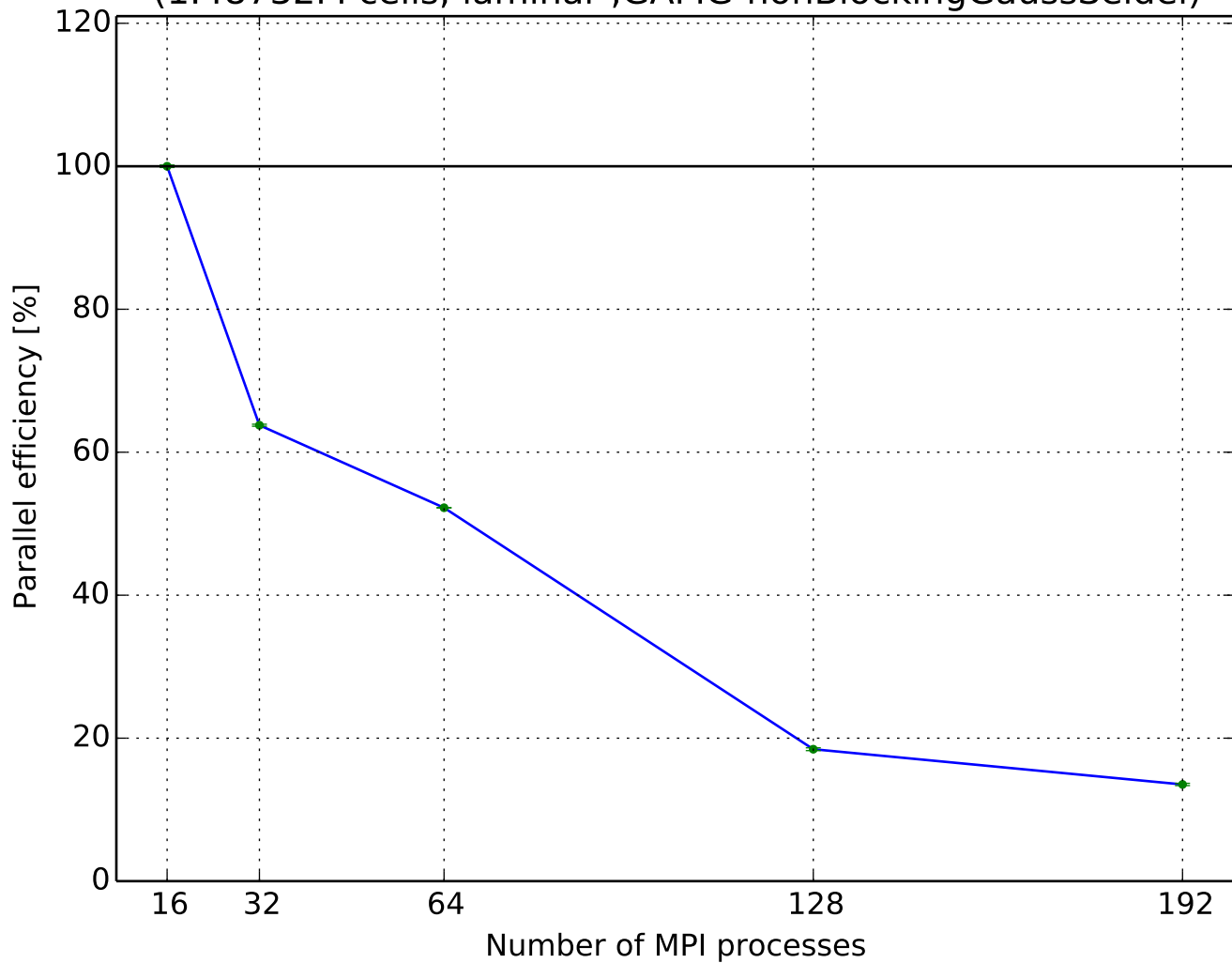
Execution time per time step
(1.48732M cells, laminar ,GAMG-nonBlockingGaussSeidel)



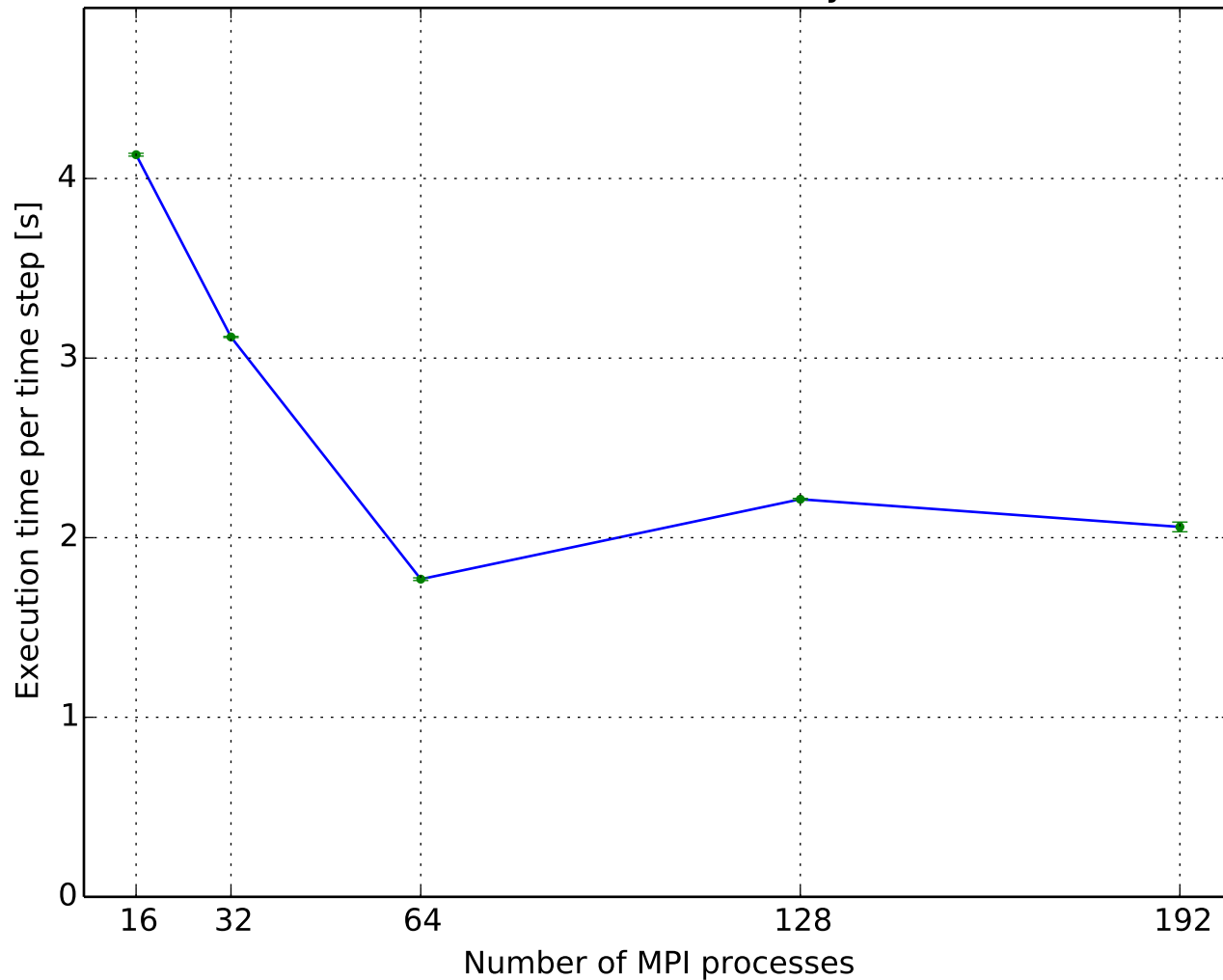
Speedup ratio
(1.48732M cells, laminar ,GAMG-nonBlockingGaussSeidel)



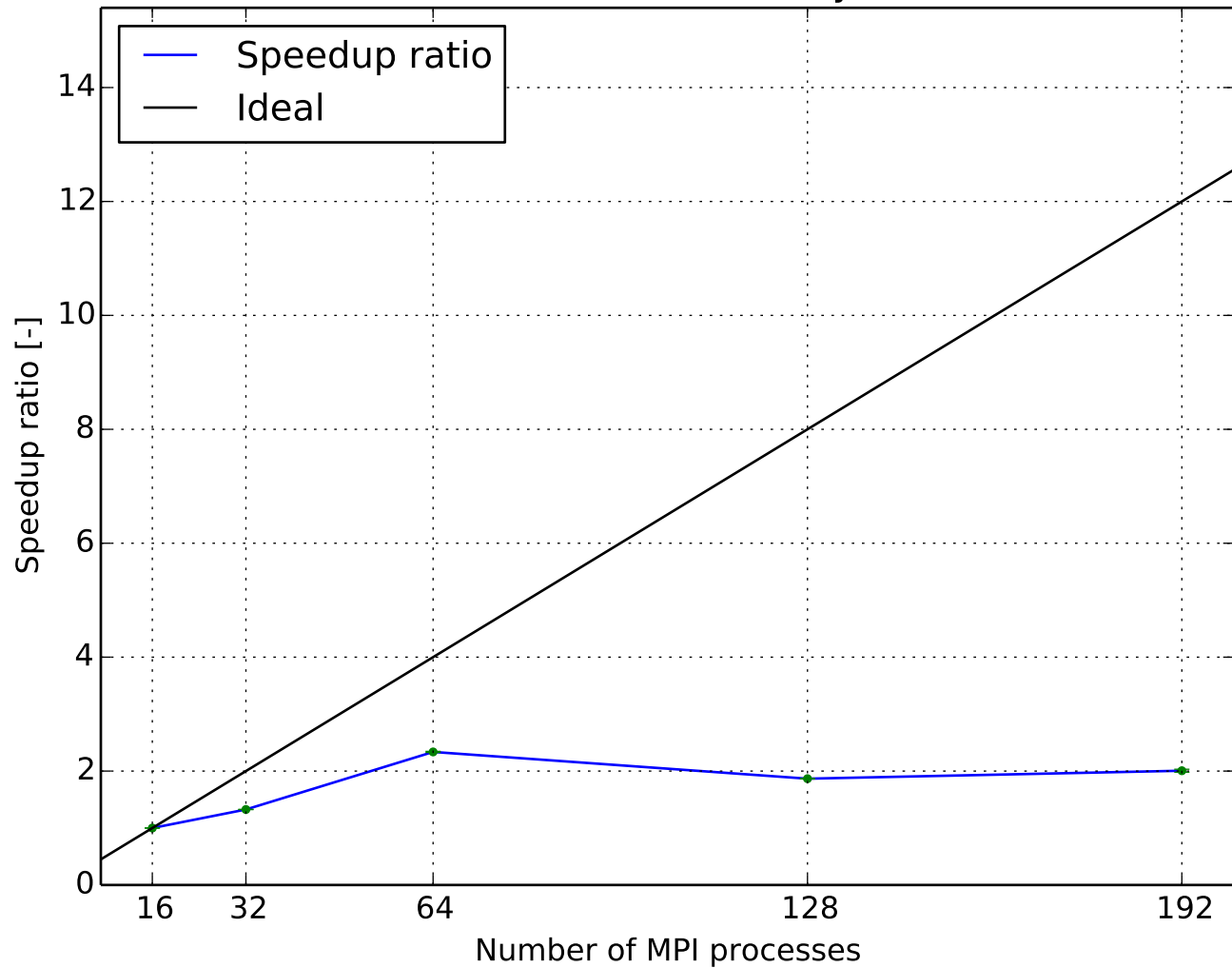
Parallel efficiency
(1.48732M cells, laminar ,GAMG-nonBlockingGaussSeidel)



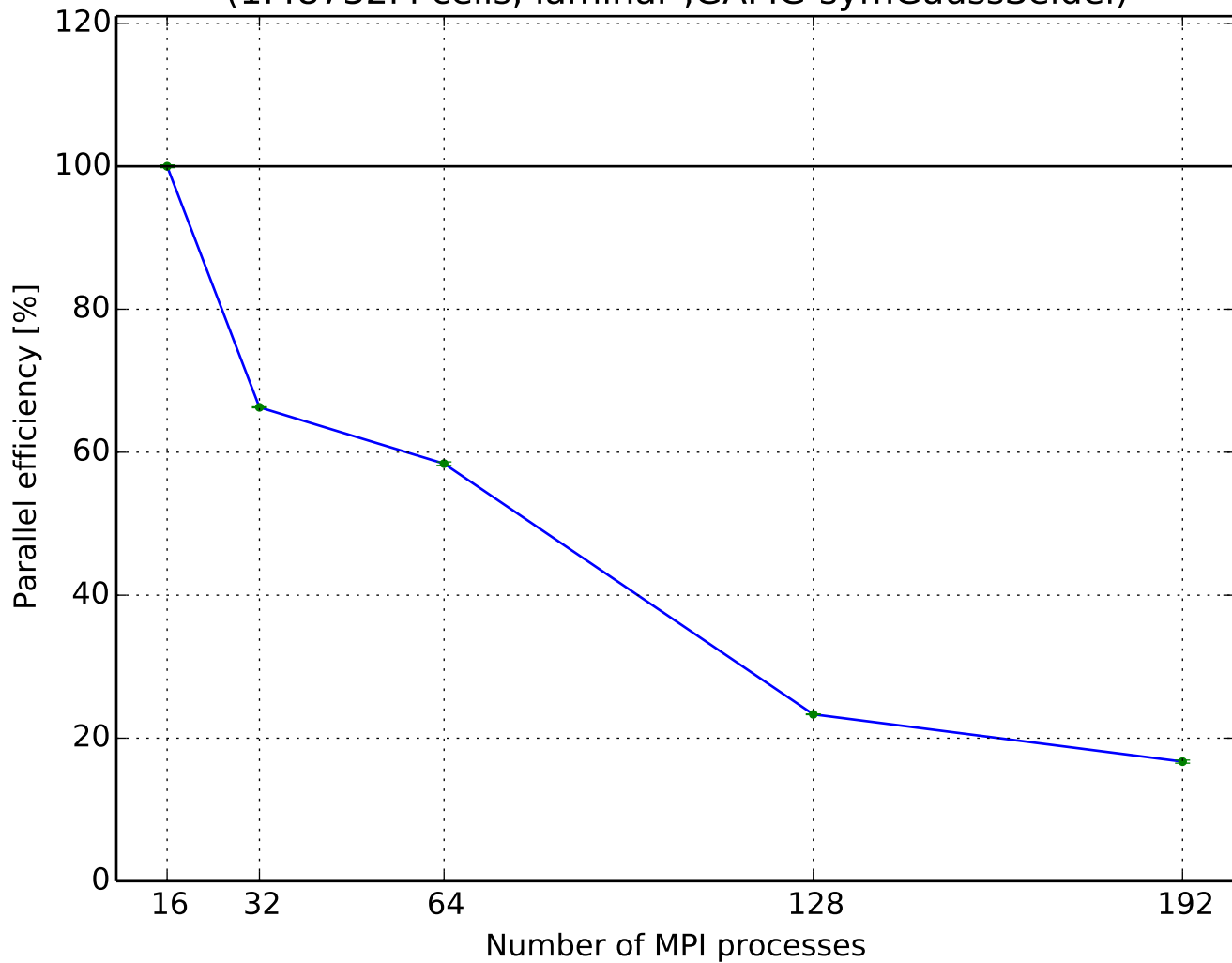
Execution time per time step
(1.48732M cells, laminar ,GAMG-symGaussSeidel)



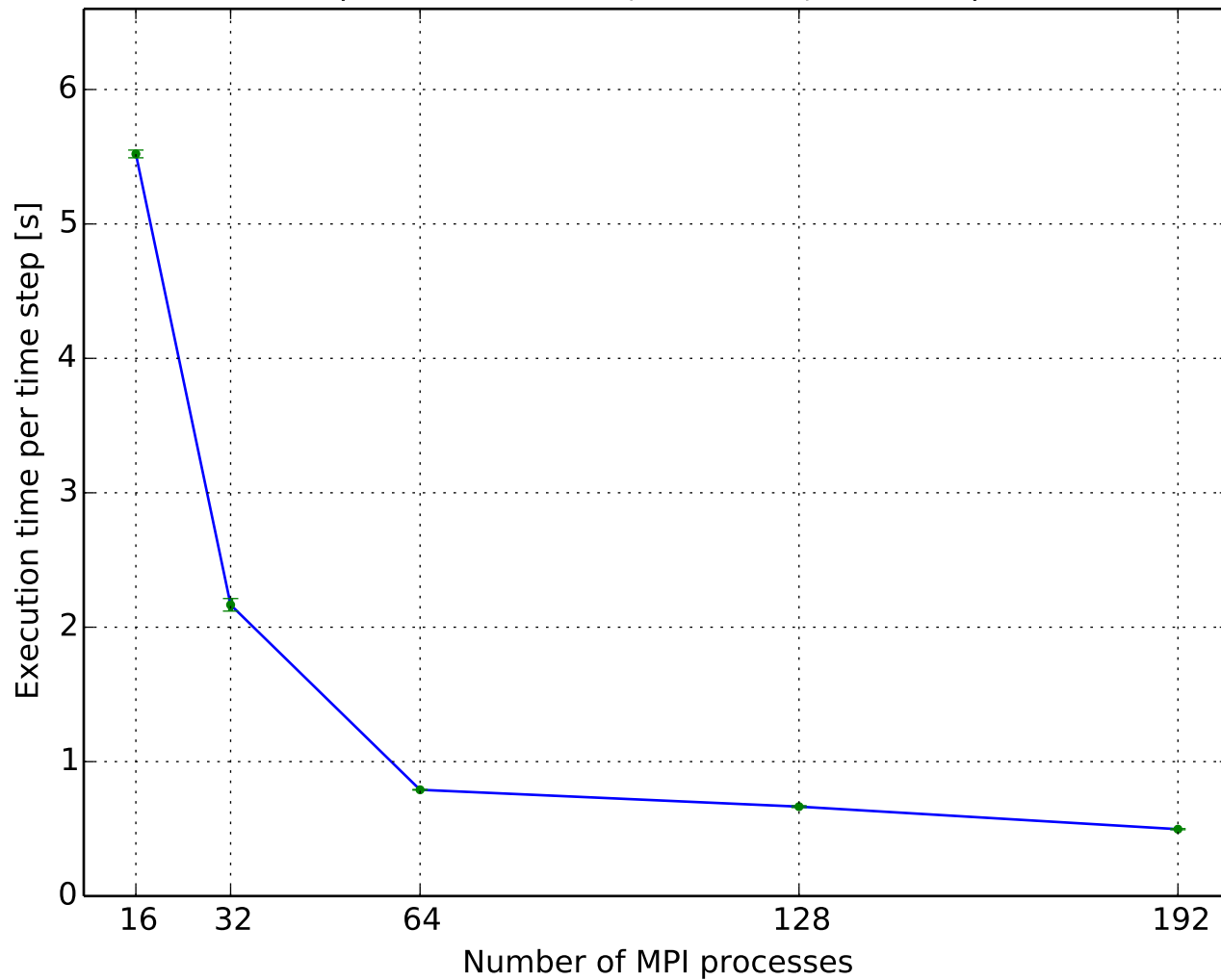
Speedup ratio
(1.48732M cells, laminar ,GAMG-symGaussSeidel)



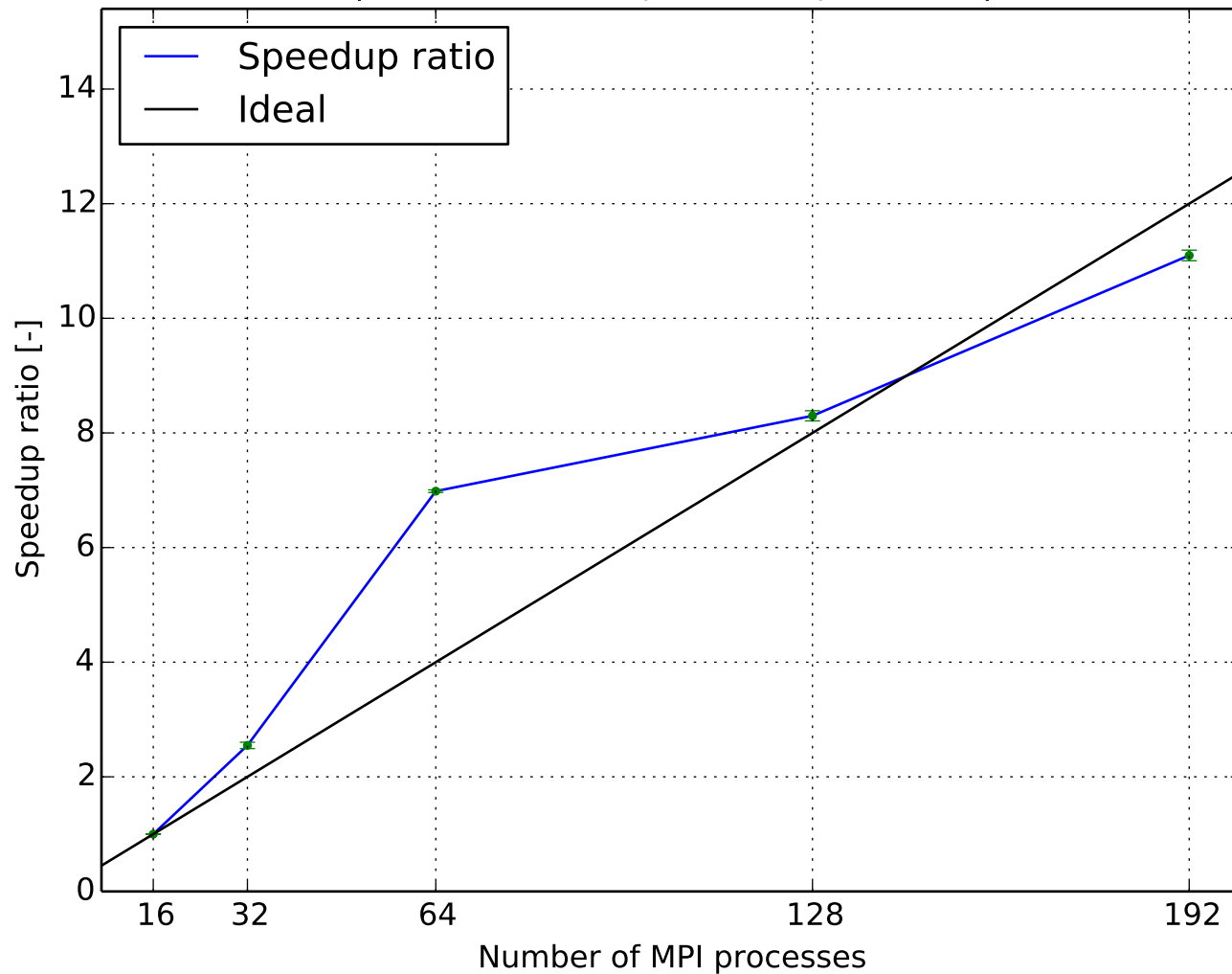
Parallel efficiency
(1.48732M cells, laminar ,GAMG-symGaussSeidel)



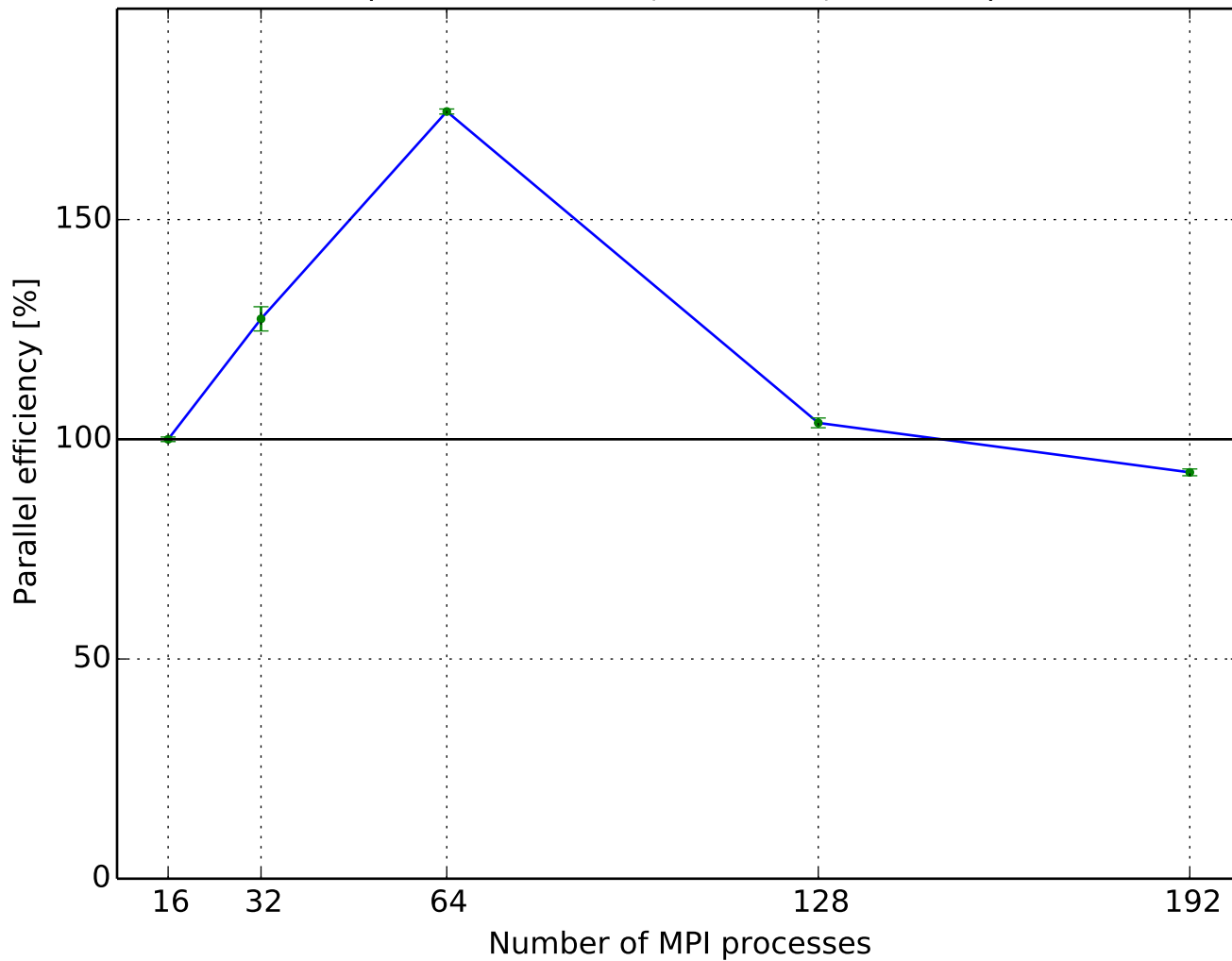
Execution time per time step
(1.48732M cells, laminar ,PCG-DIC)



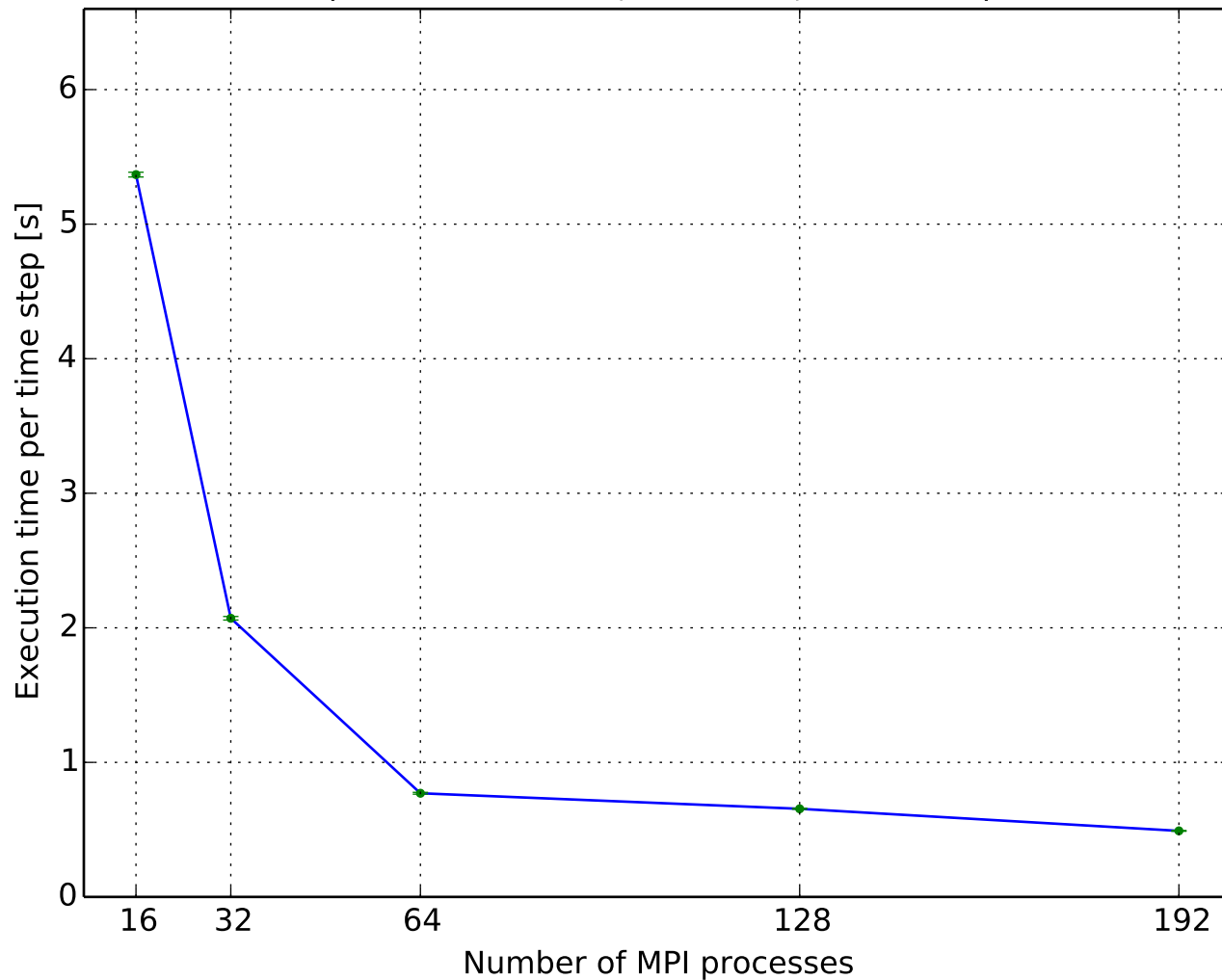
Speedup ratio
(1.48732M cells, laminar ,PCG-DIC)



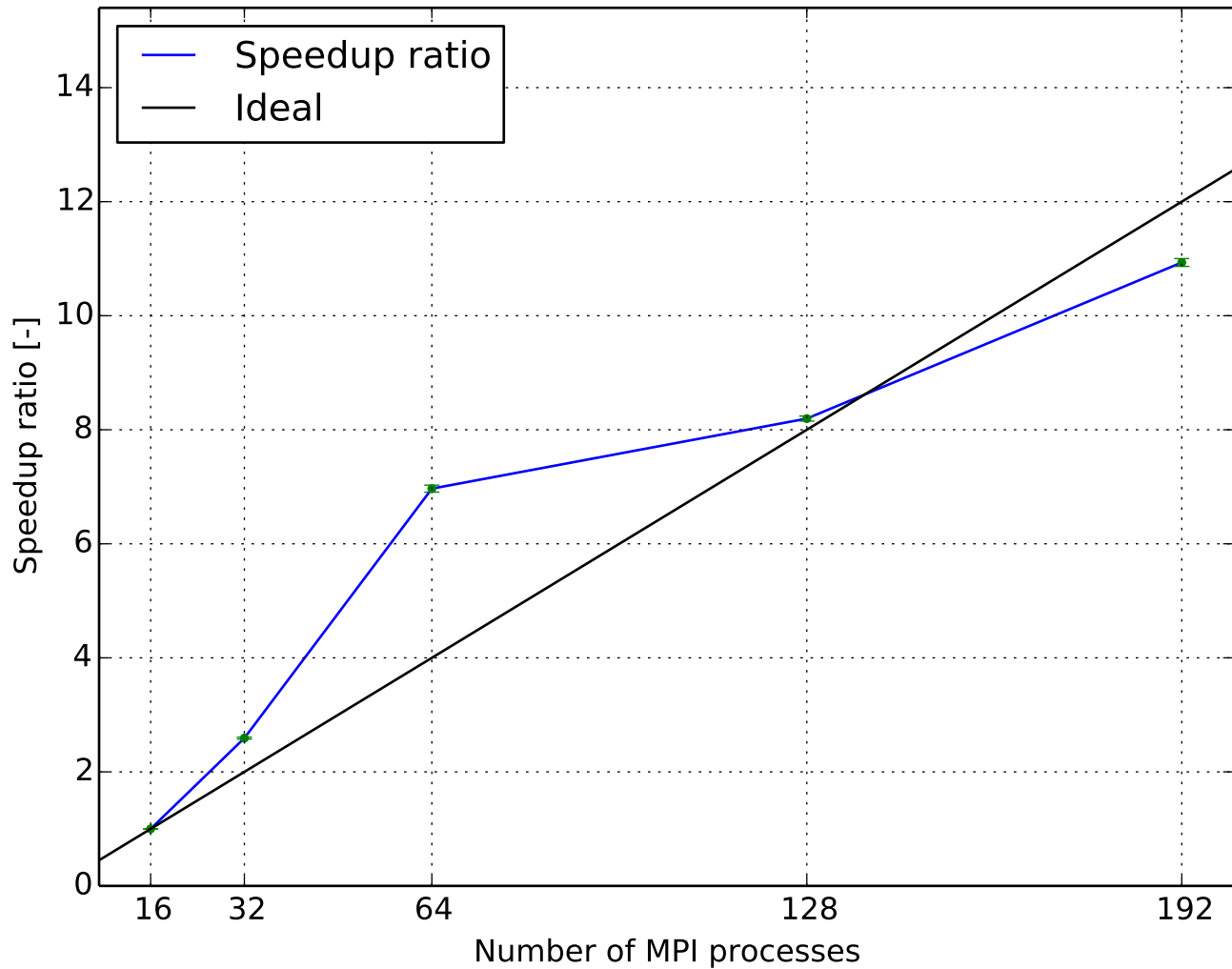
Parallel efficiency
(1.48732M cells, laminar ,PCG-DIC)



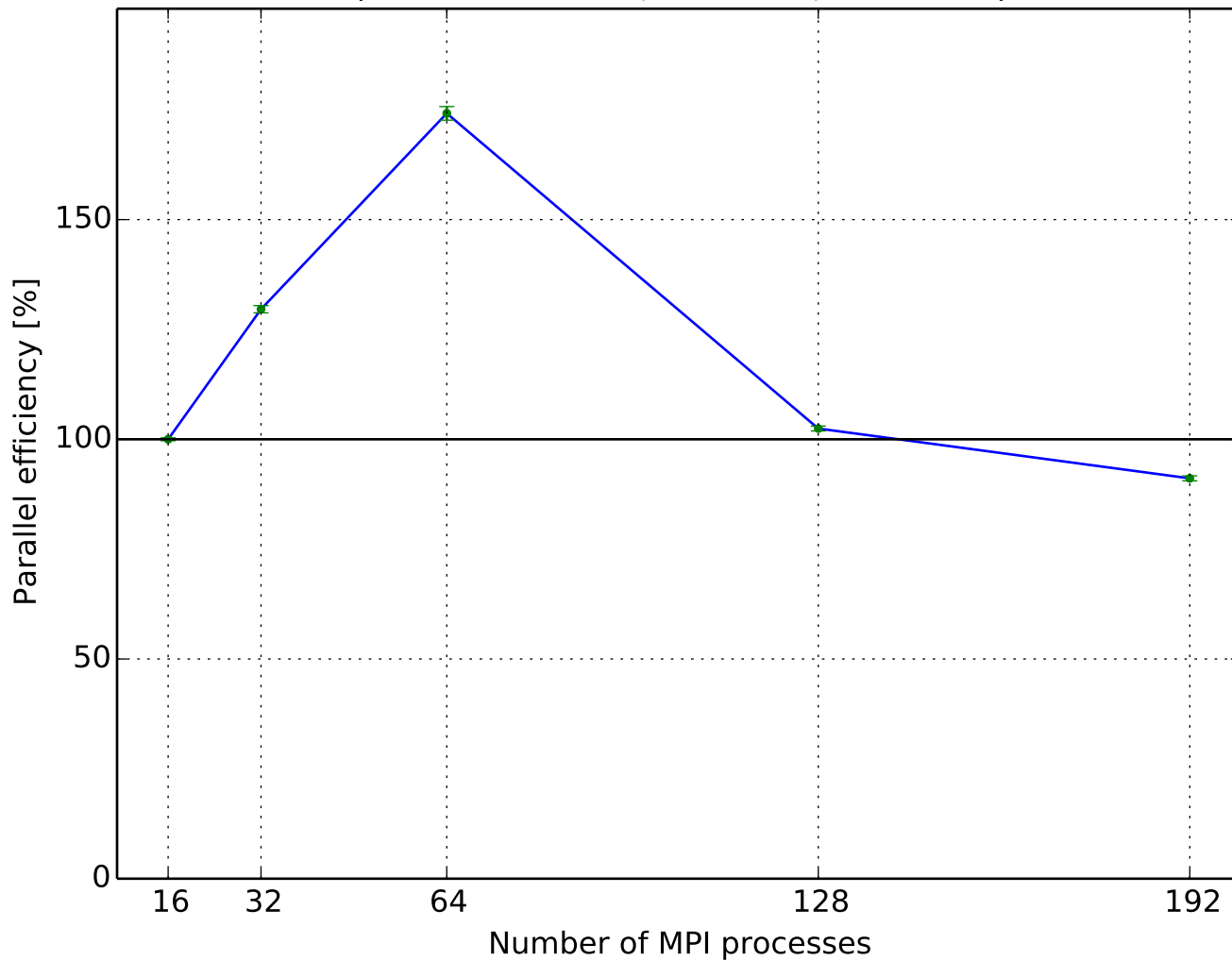
Execution time per time step
(1.48732M cells, laminar ,PCG-FDIC)



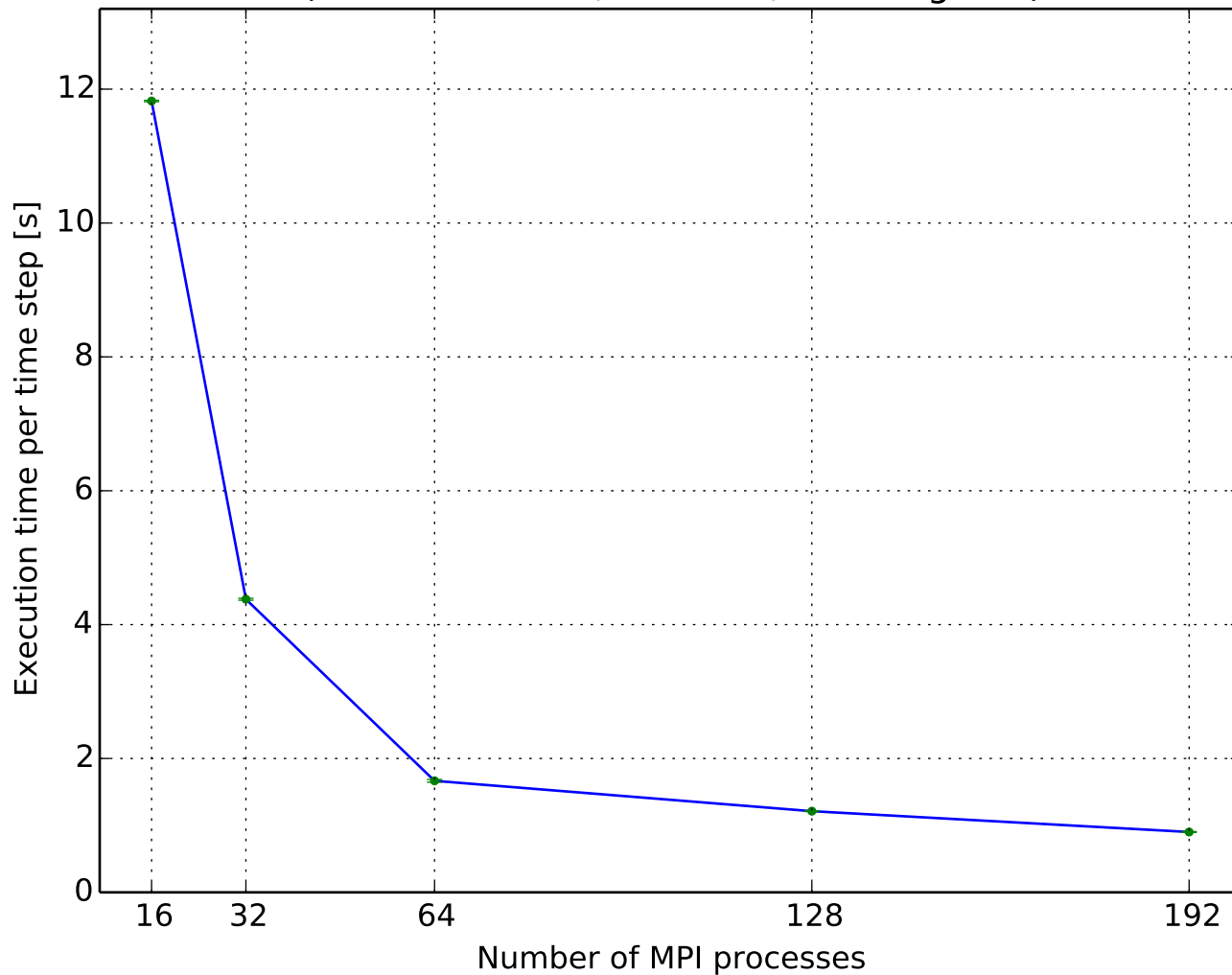
Speedup ratio
(1.48732M cells, laminar ,PCG-FDIC)



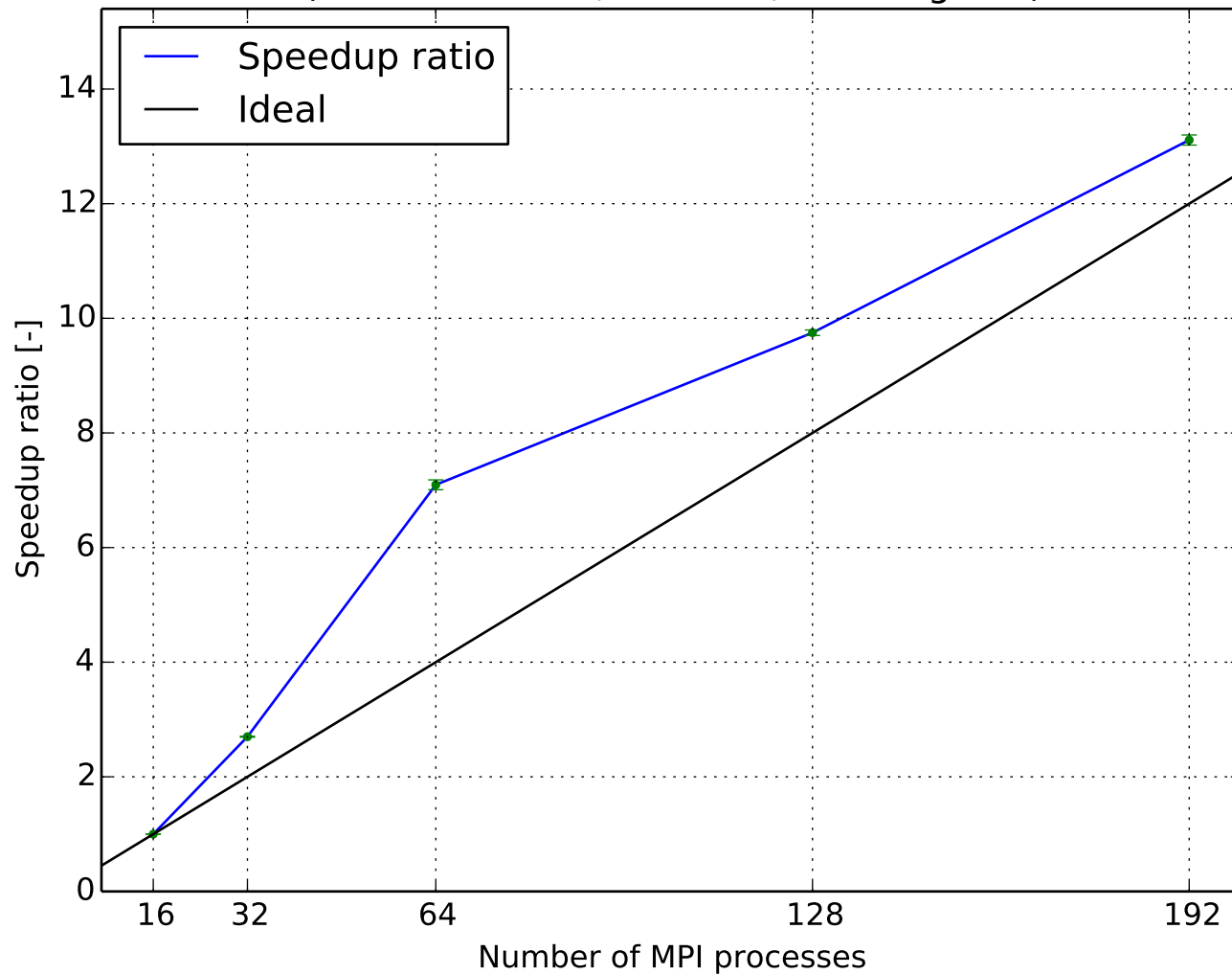
Parallel efficiency
(1.48732M cells, laminar ,PCG-FDIC)



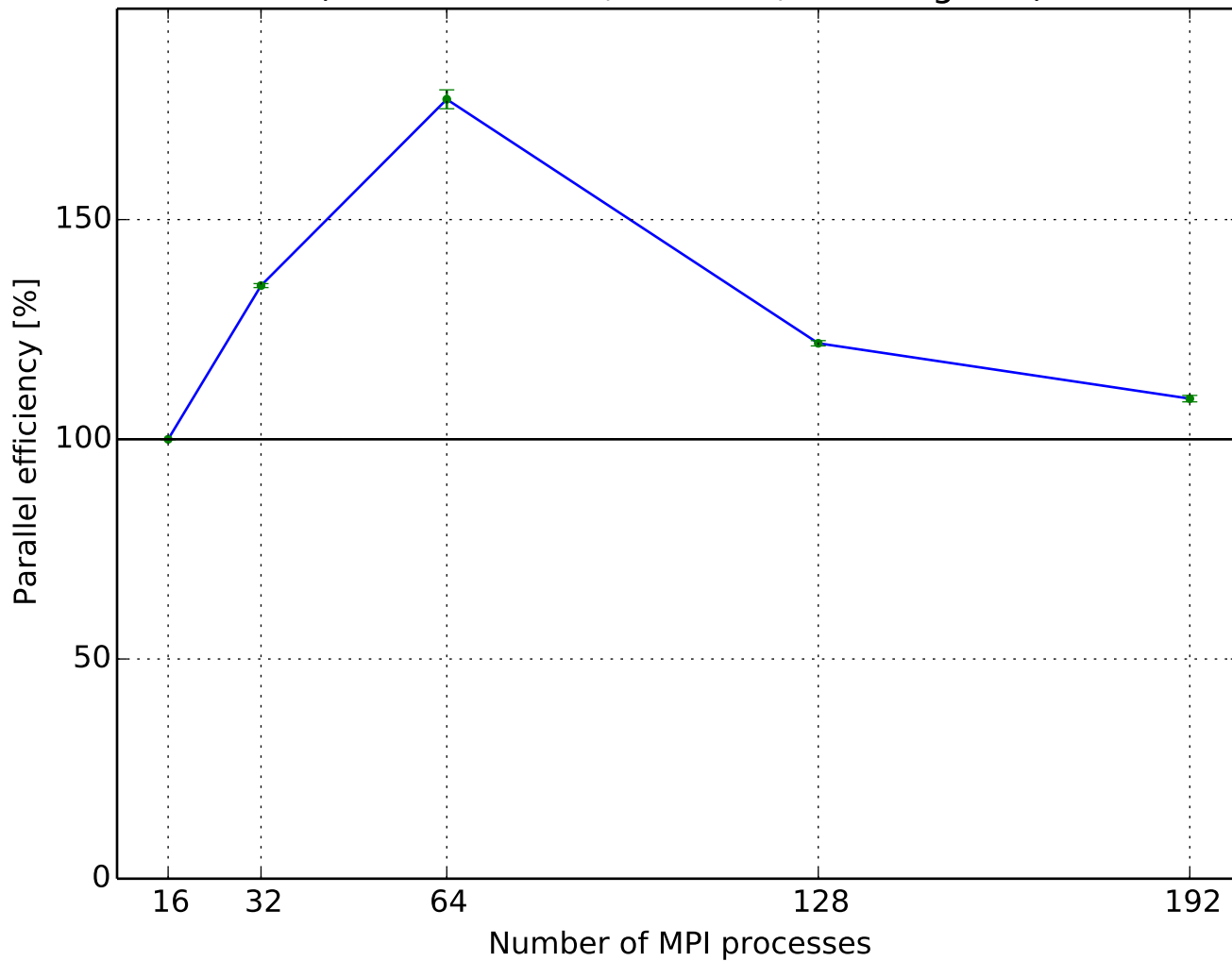
Execution time per time step
(1.48732M cells, laminar ,PCG-diagonal)



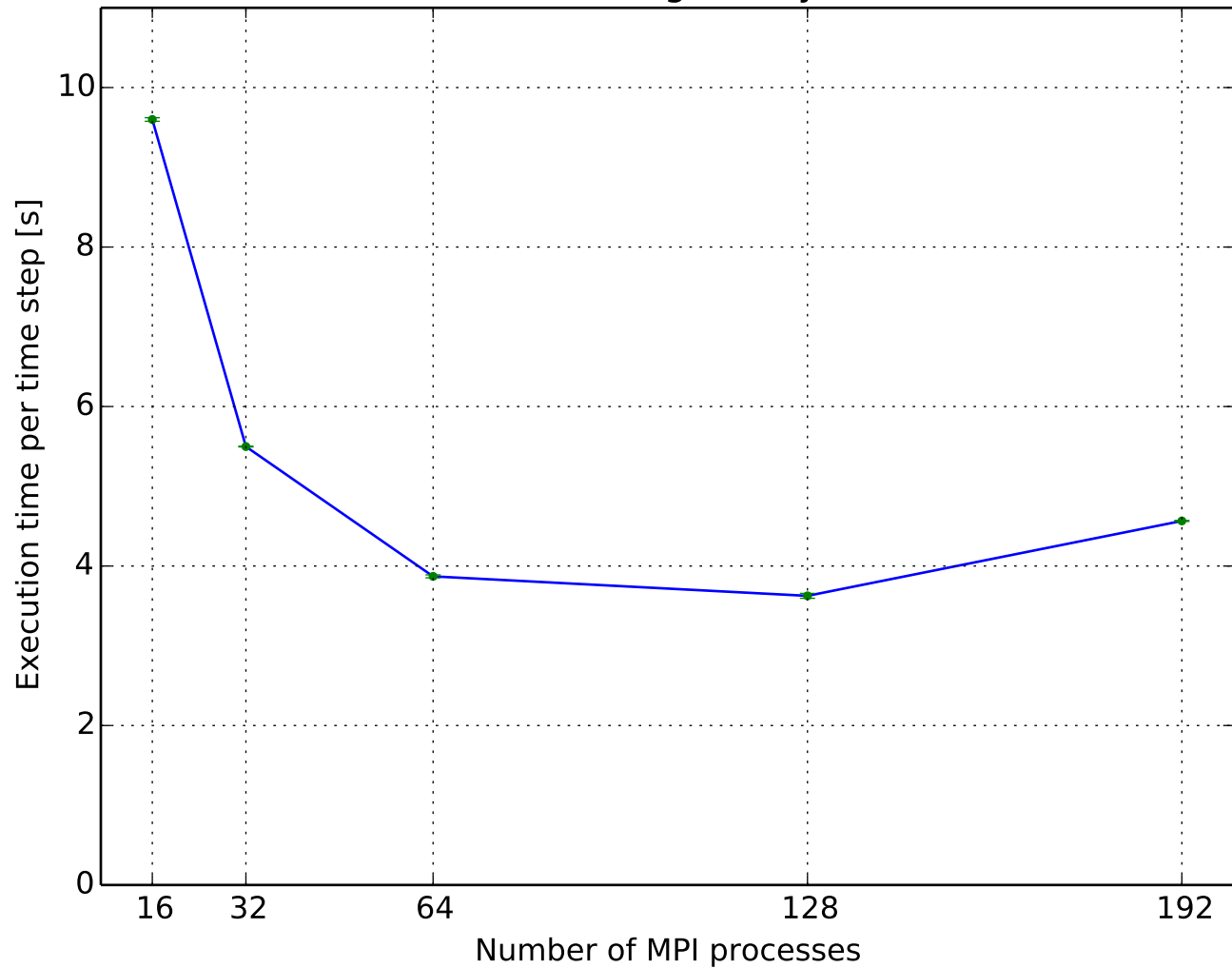
Speedup ratio
(1.48732M cells, laminar ,PCG-diagonal)



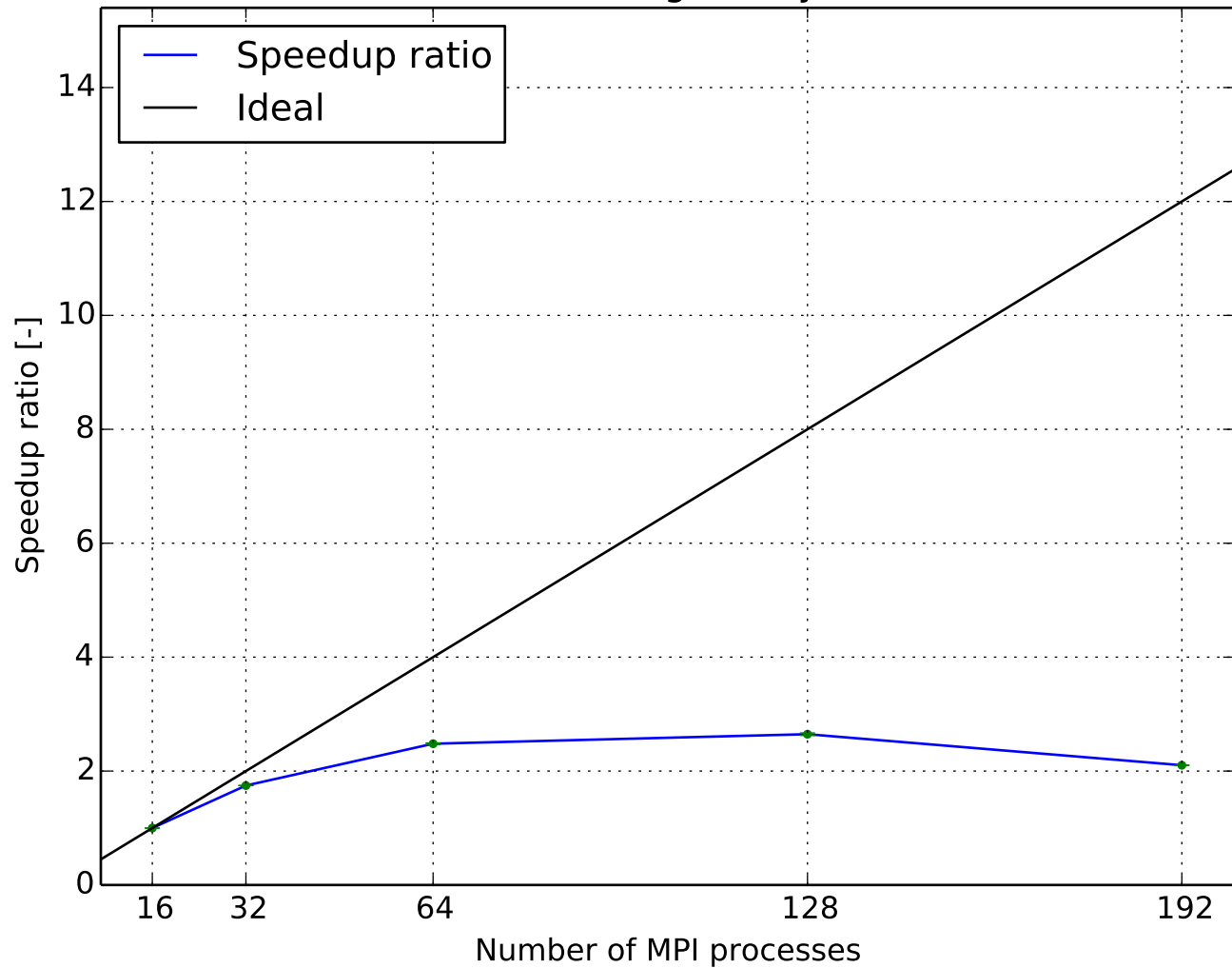
Parallel efficiency
(1.48732M cells, laminar ,PCG-diagonal)



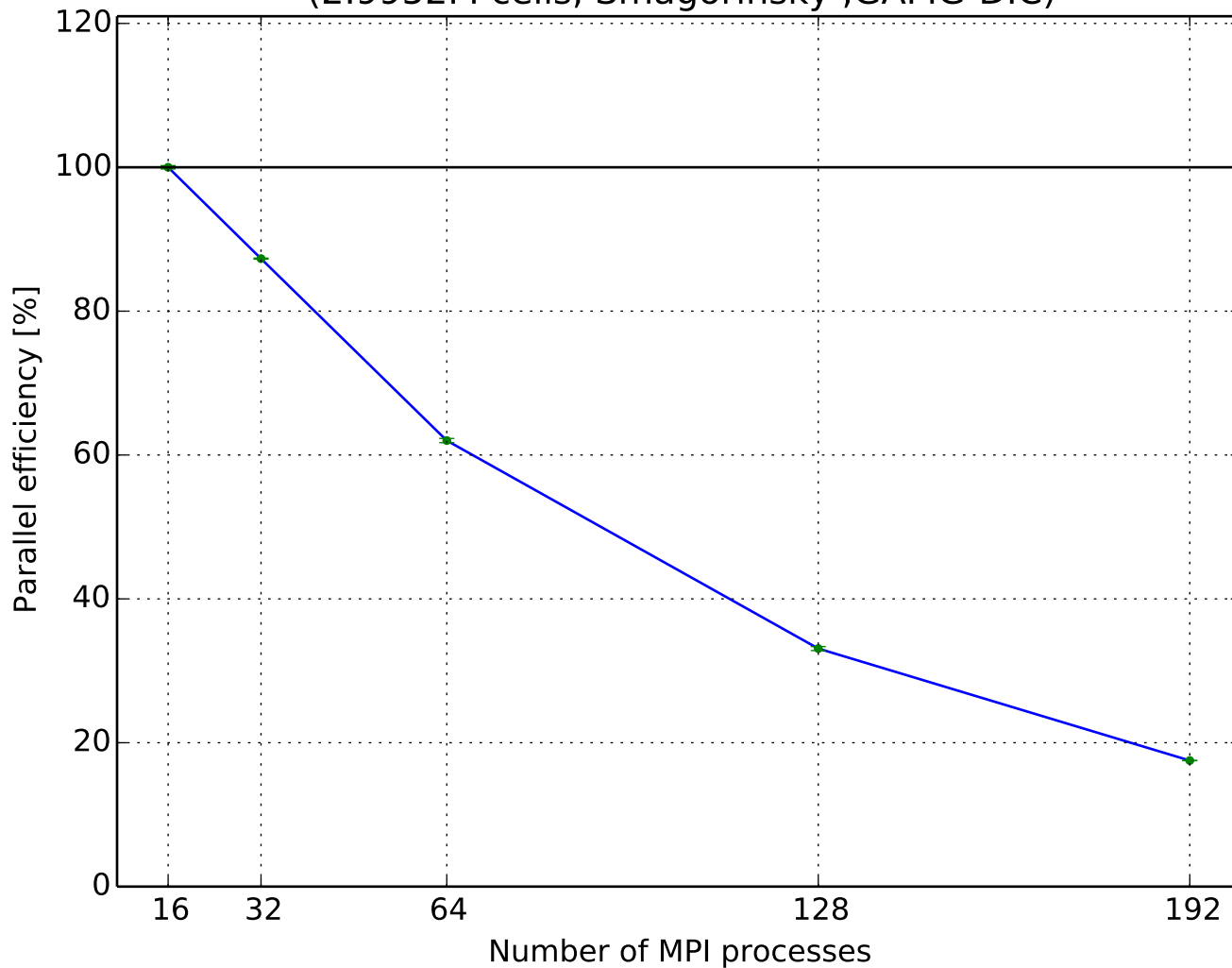
Execution time per time step
(2.9952M cells, Smagorinsky ,GAMG-DIC)



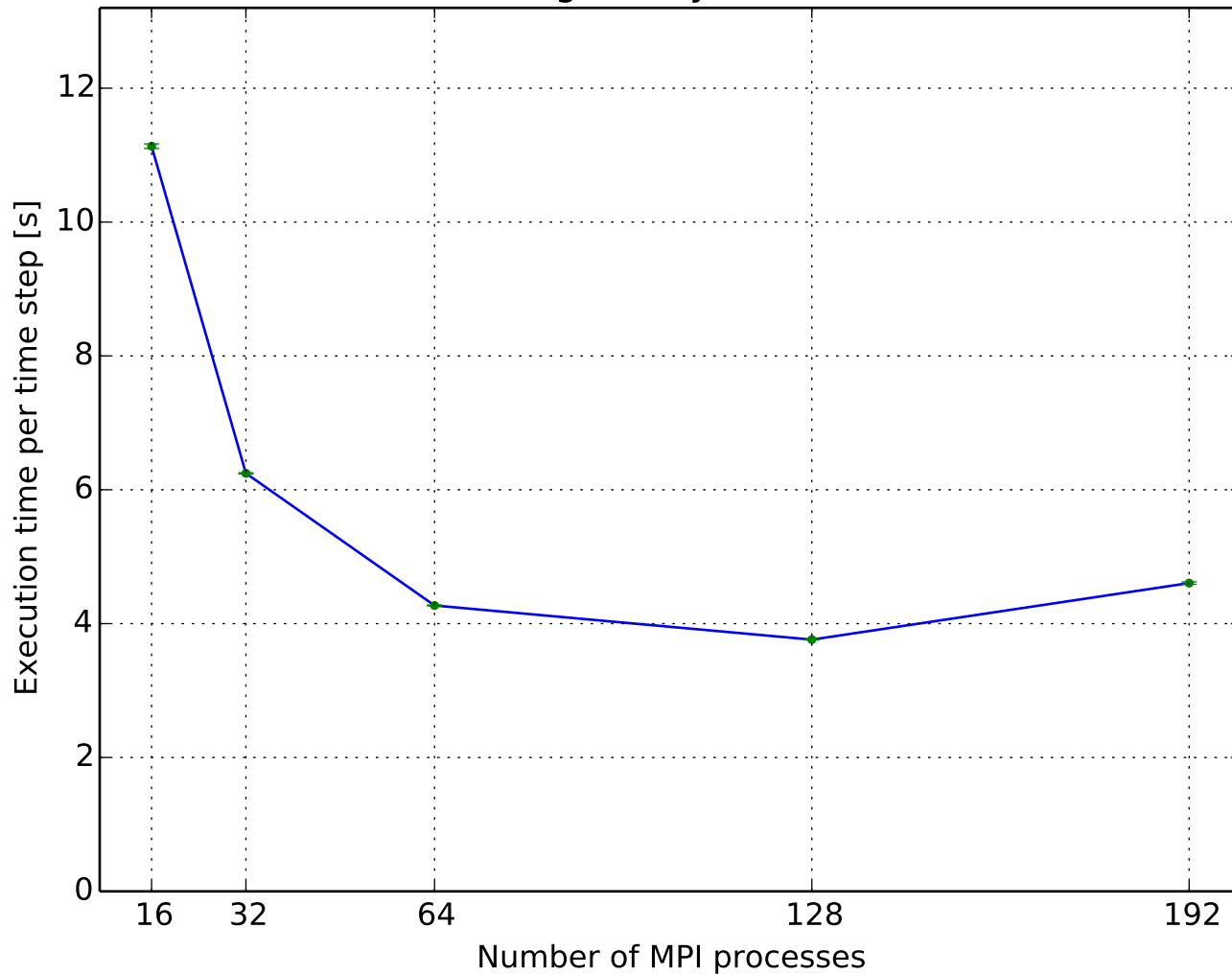
Speedup ratio
(2.9952M cells, Smagorinsky ,GAMG-DIC)



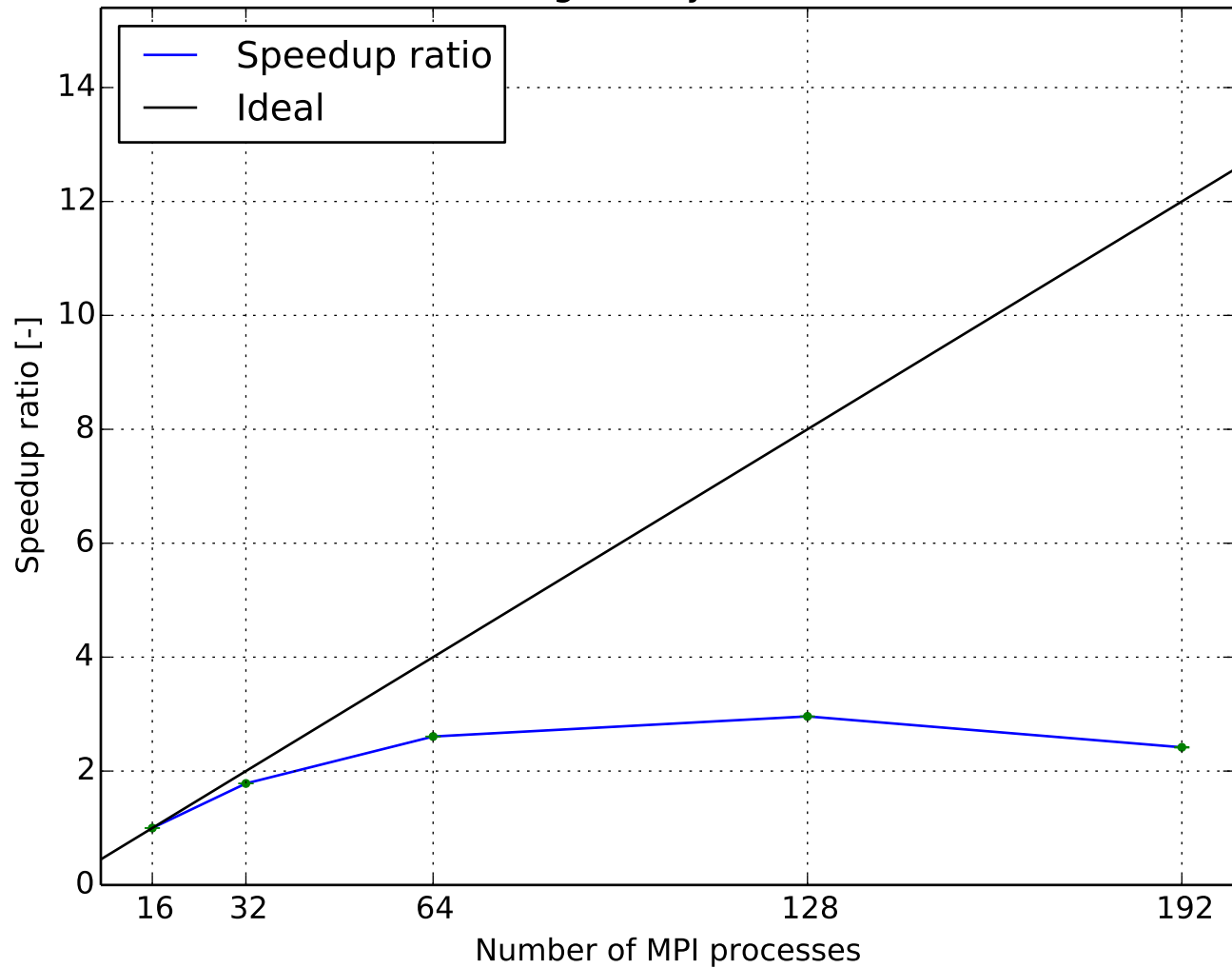
Parallel efficiency
(2.9952M cells, Smagorinsky ,GAMG-DIC)



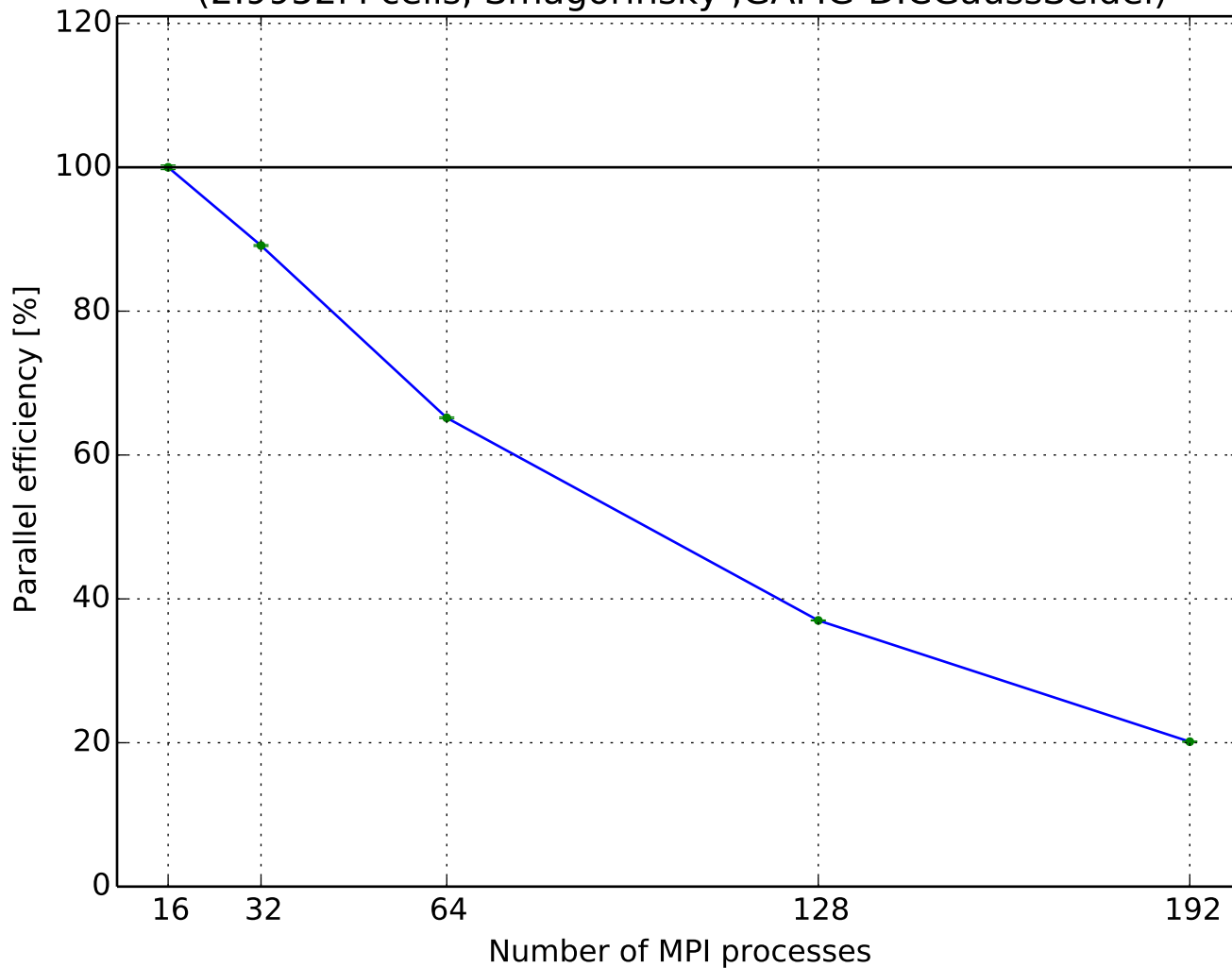
Execution time per time step
(2.9952M cells, Smagorinsky ,GAMG-DICGaussSeidel)



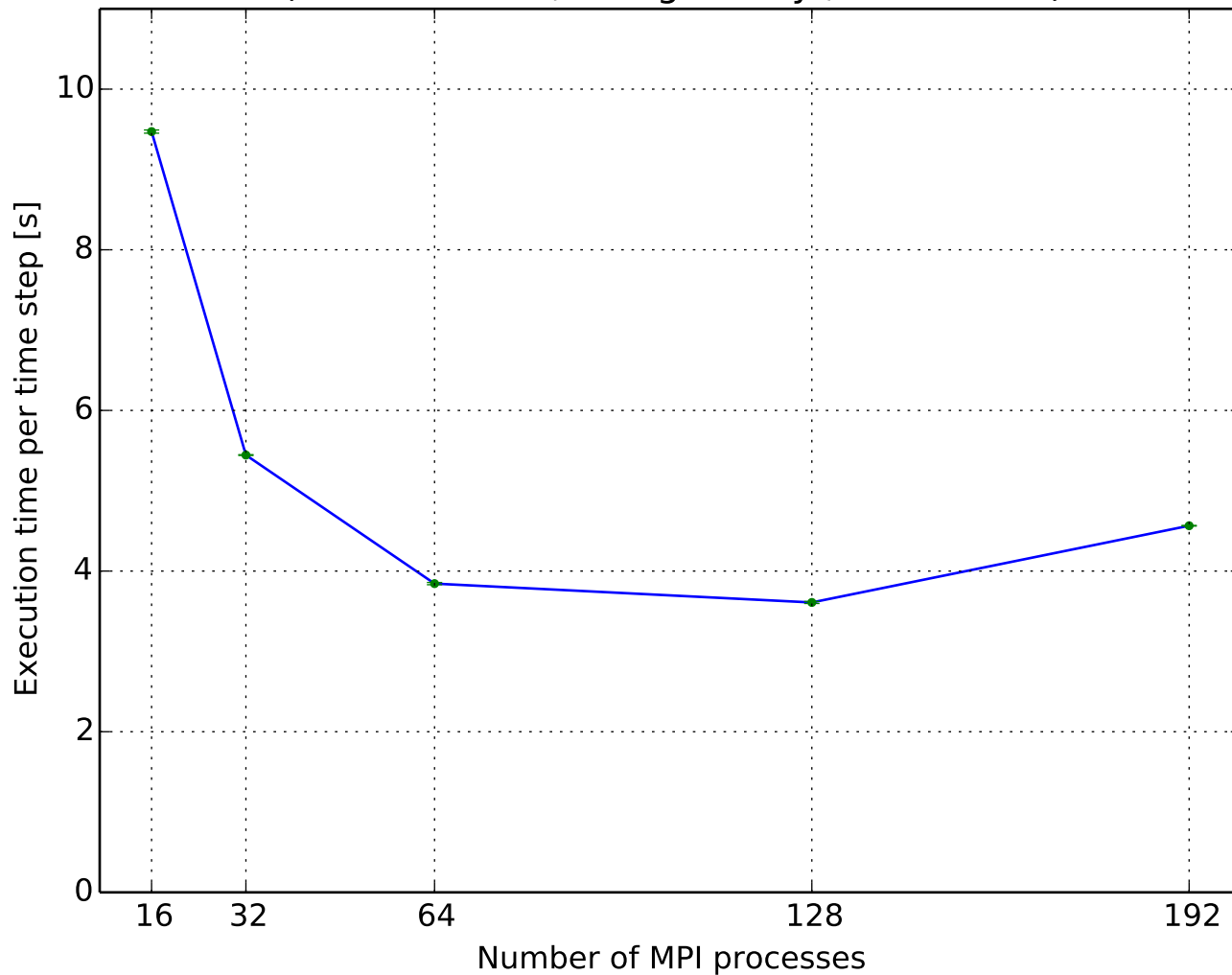
Speedup ratio
(2.9952M cells, Smagorinsky ,GAMG-DICGaussSeidel)



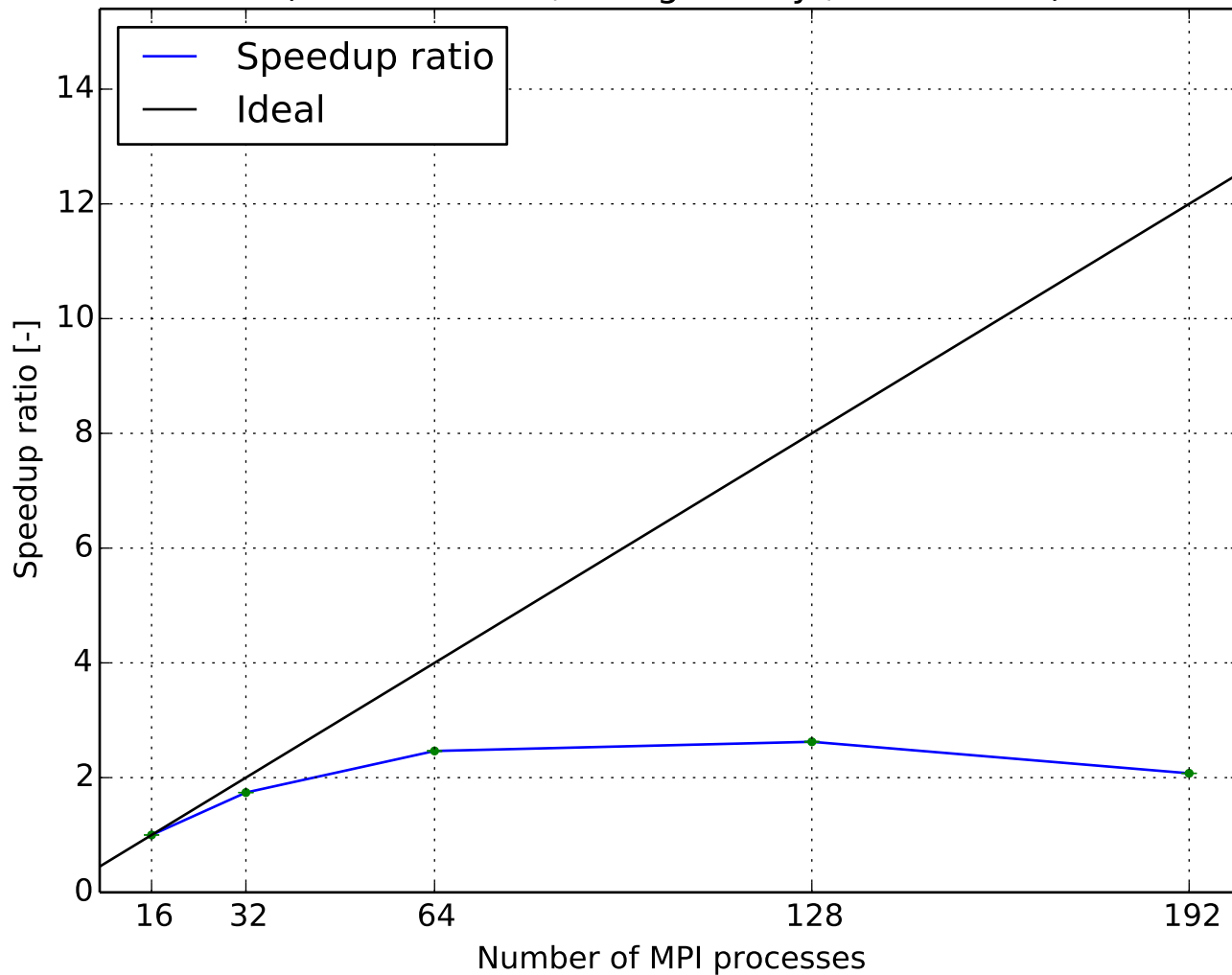
Parallel efficiency
(2.9952M cells, Smagorinsky ,GAMG-DICGaussSeidel)



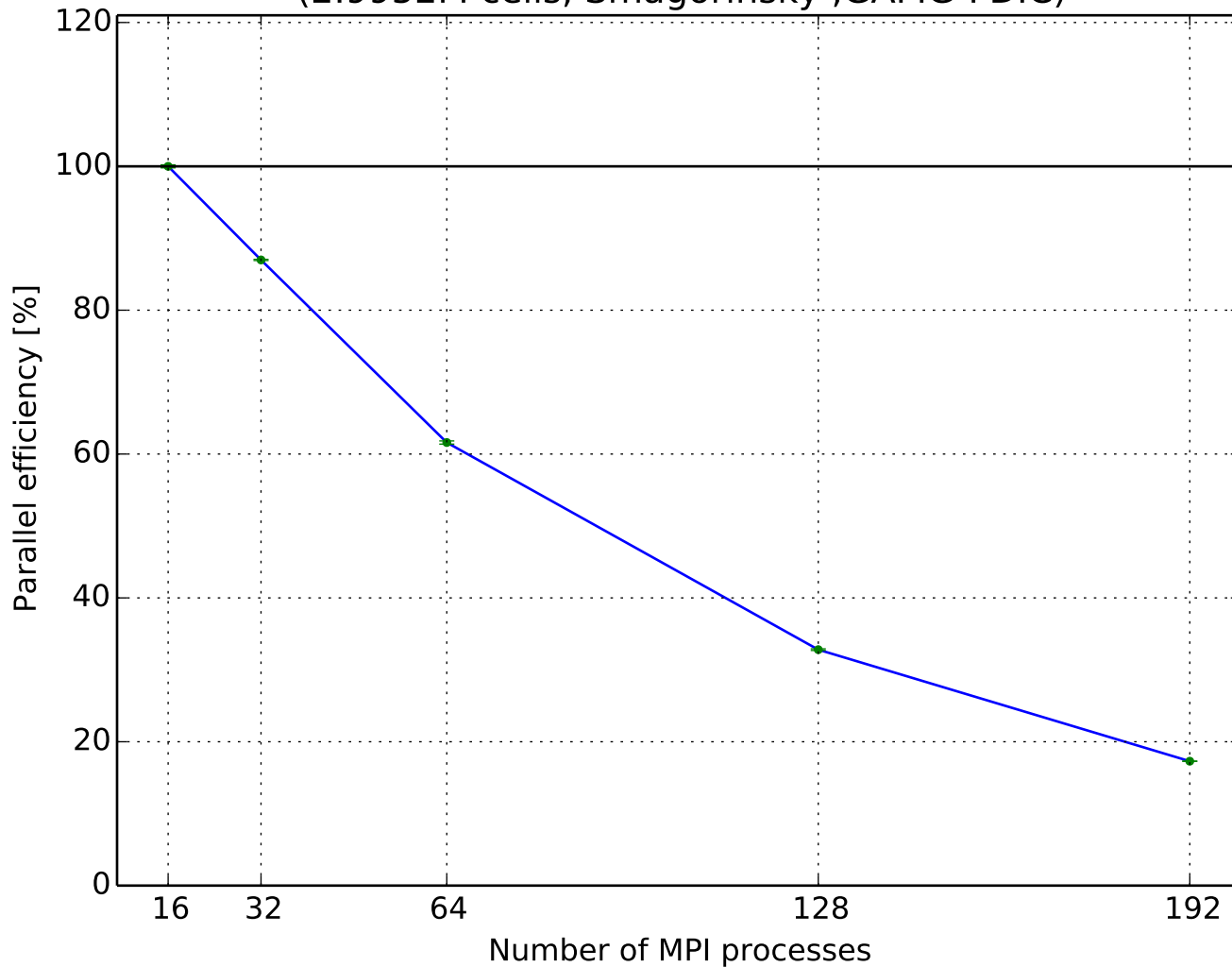
Execution time per time step
(2.9952M cells, Smagorinsky ,GAMG-FDIC)



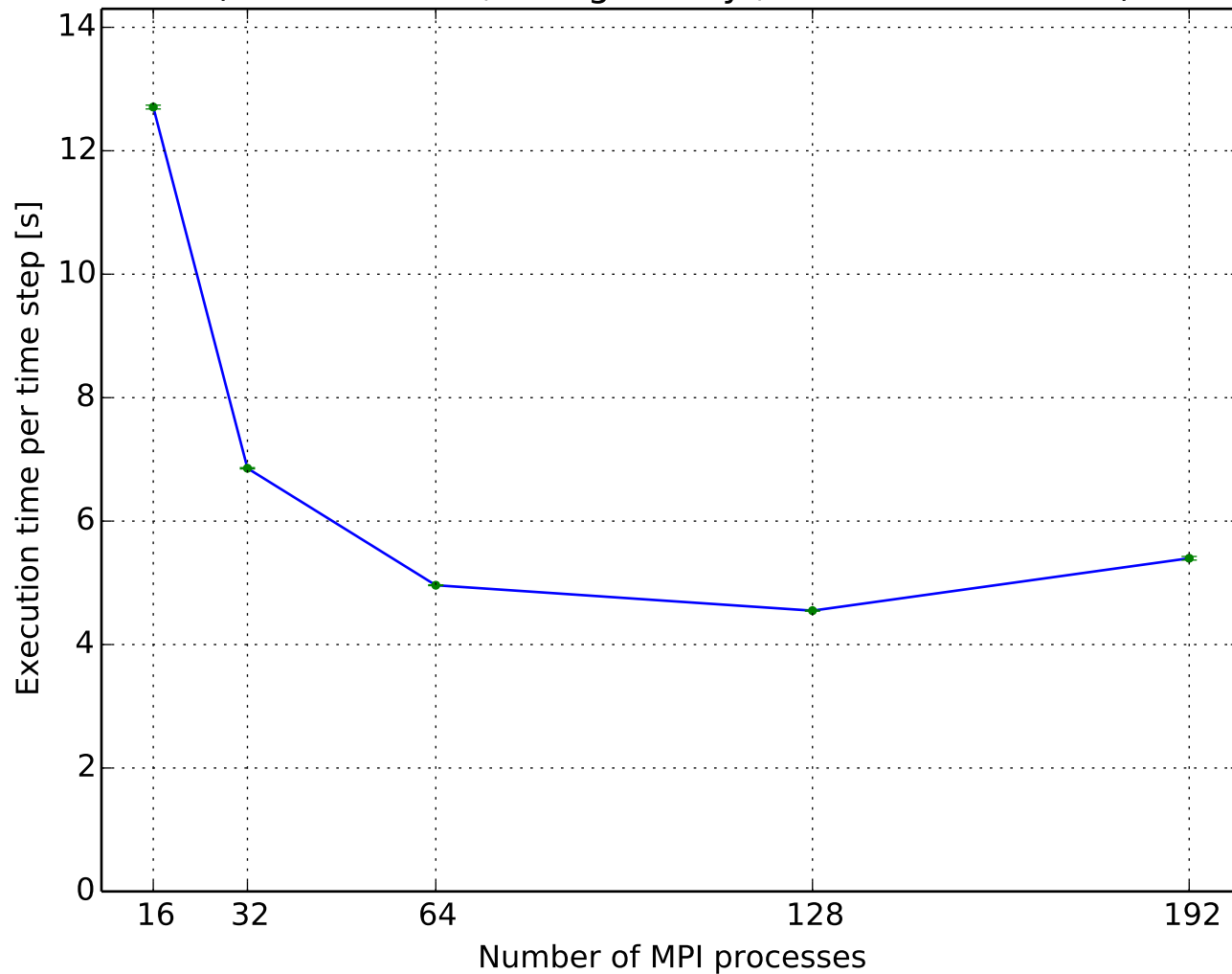
Speedup ratio
(2.9952M cells, Smagorinsky ,GAMG-FDIC)



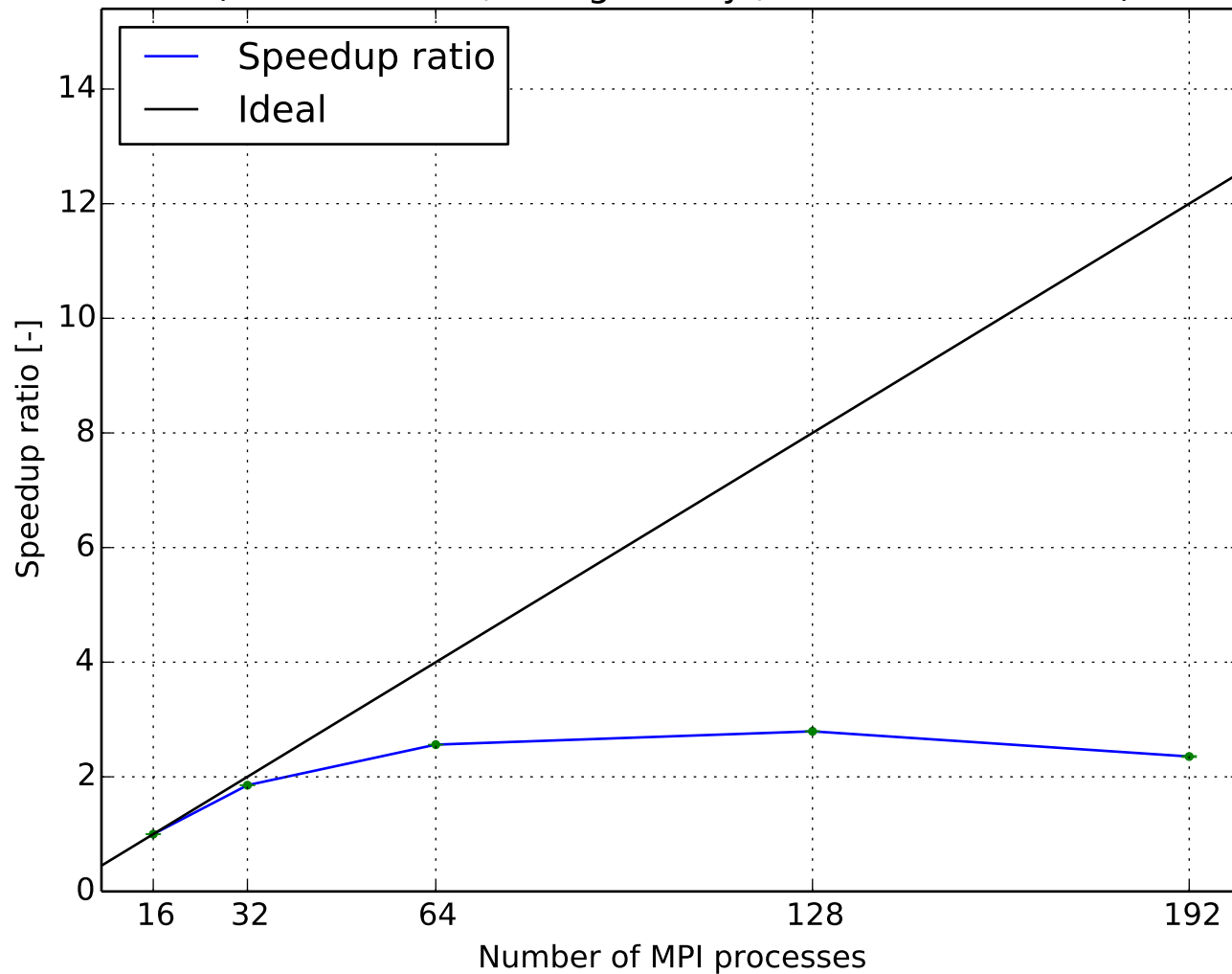
Parallel efficiency
(2.9952M cells, Smagorinsky ,GAMG-FDIC)



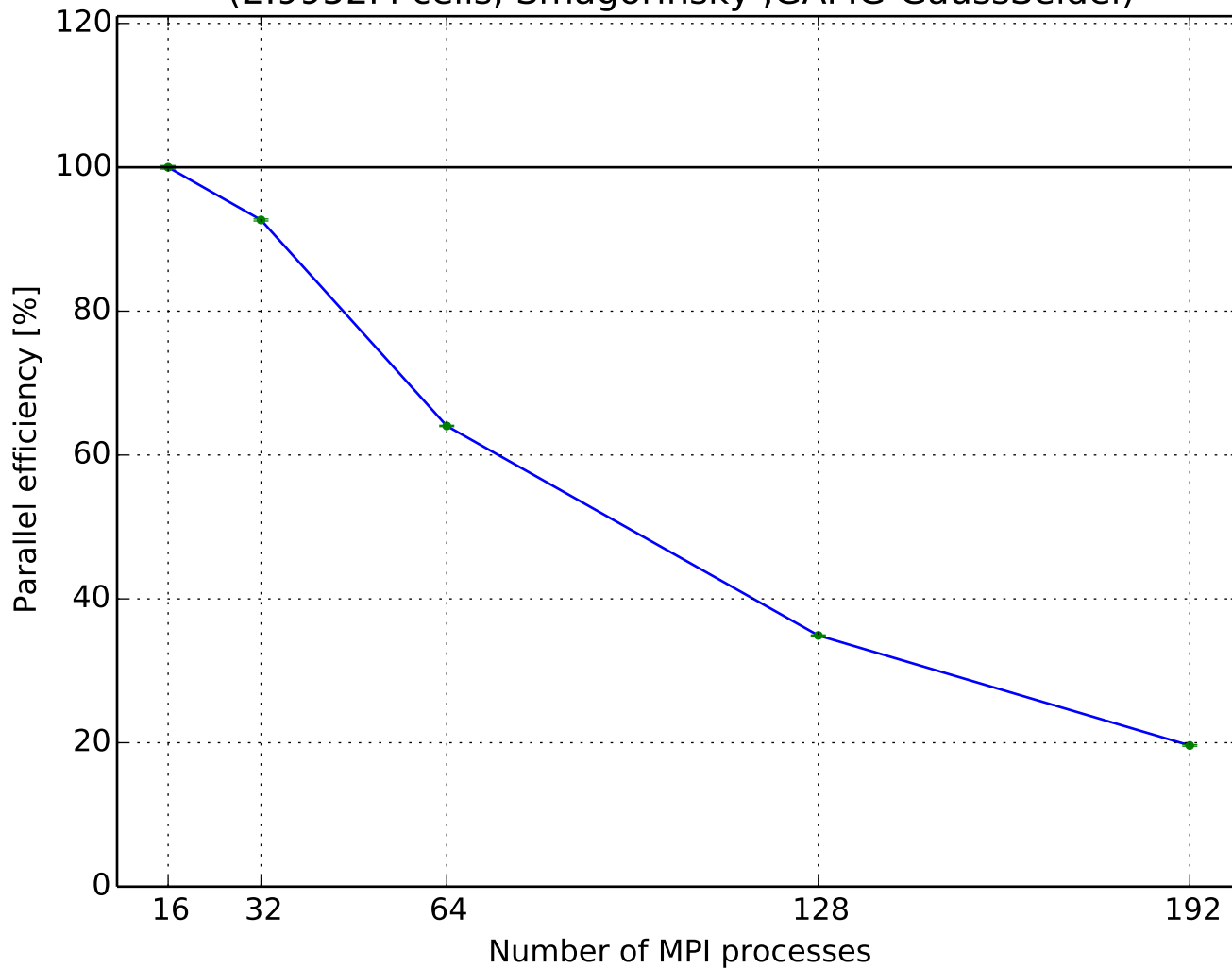
Execution time per time step
(2.9952M cells, Smagorinsky ,GAMG-GaussSeidel)



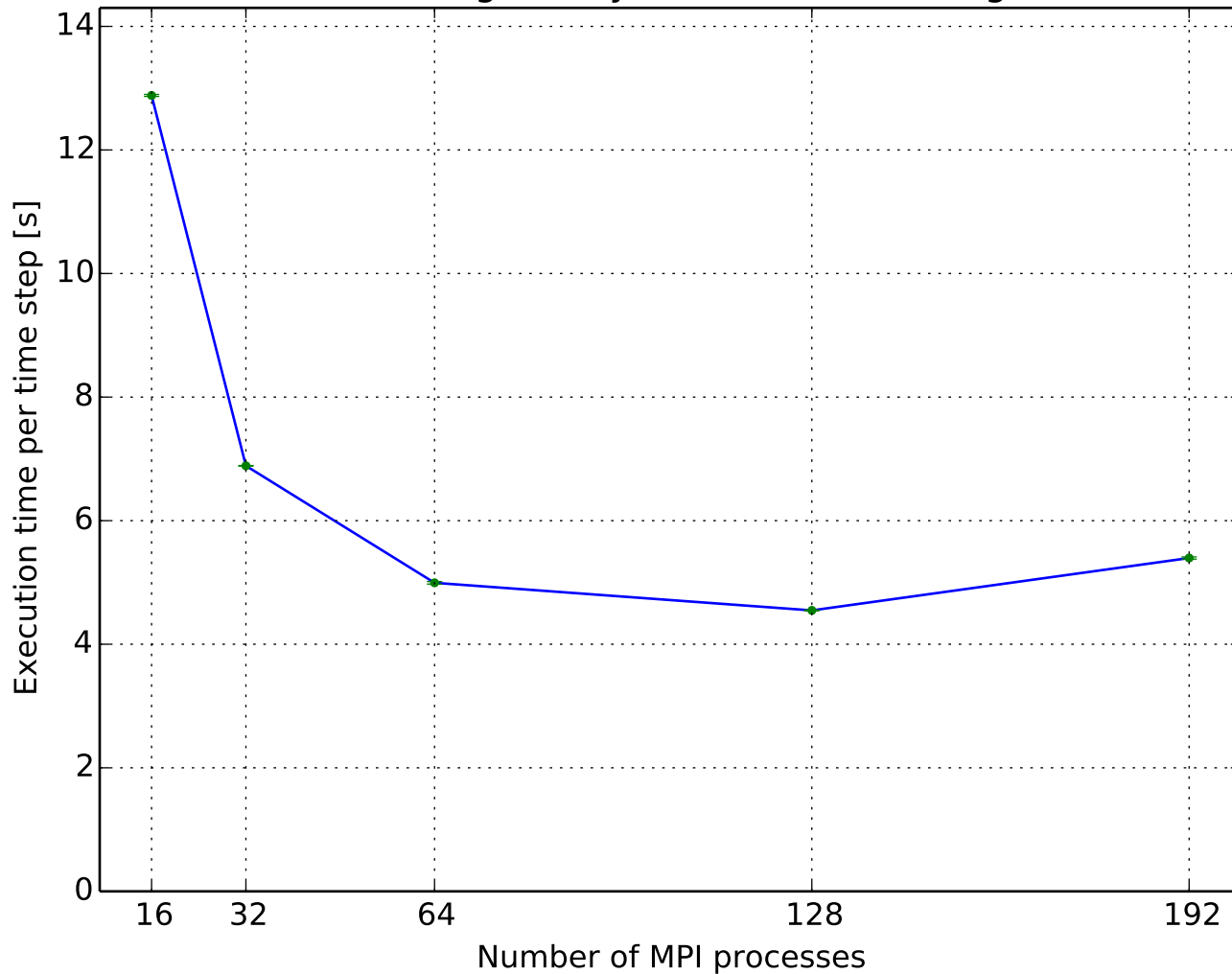
Speedup ratio
(2.9952M cells, Smagorinsky ,GAMG-GaussSeidel)



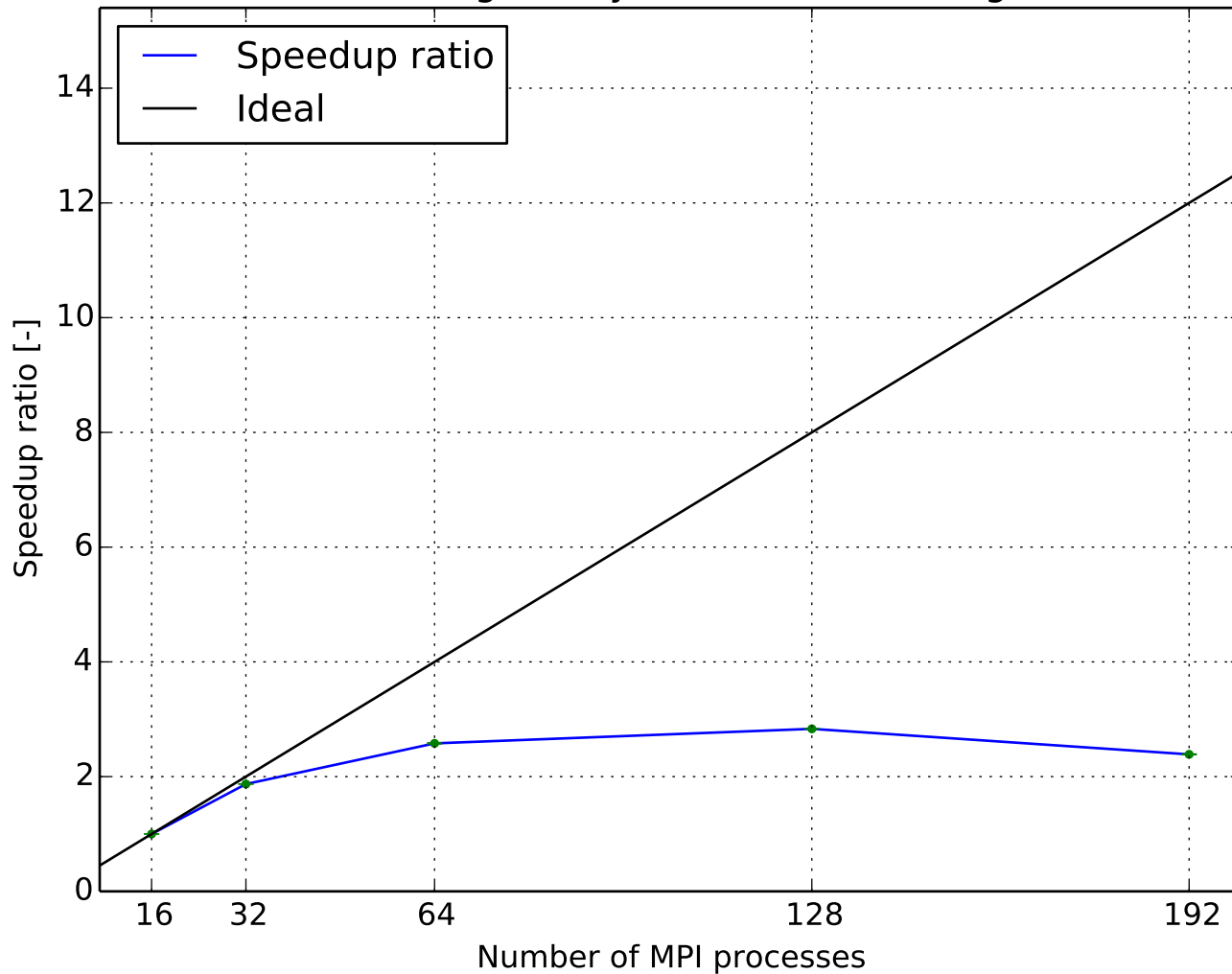
Parallel efficiency
(2.9952M cells, Smagorinsky ,GAMG-GaussSeidel)



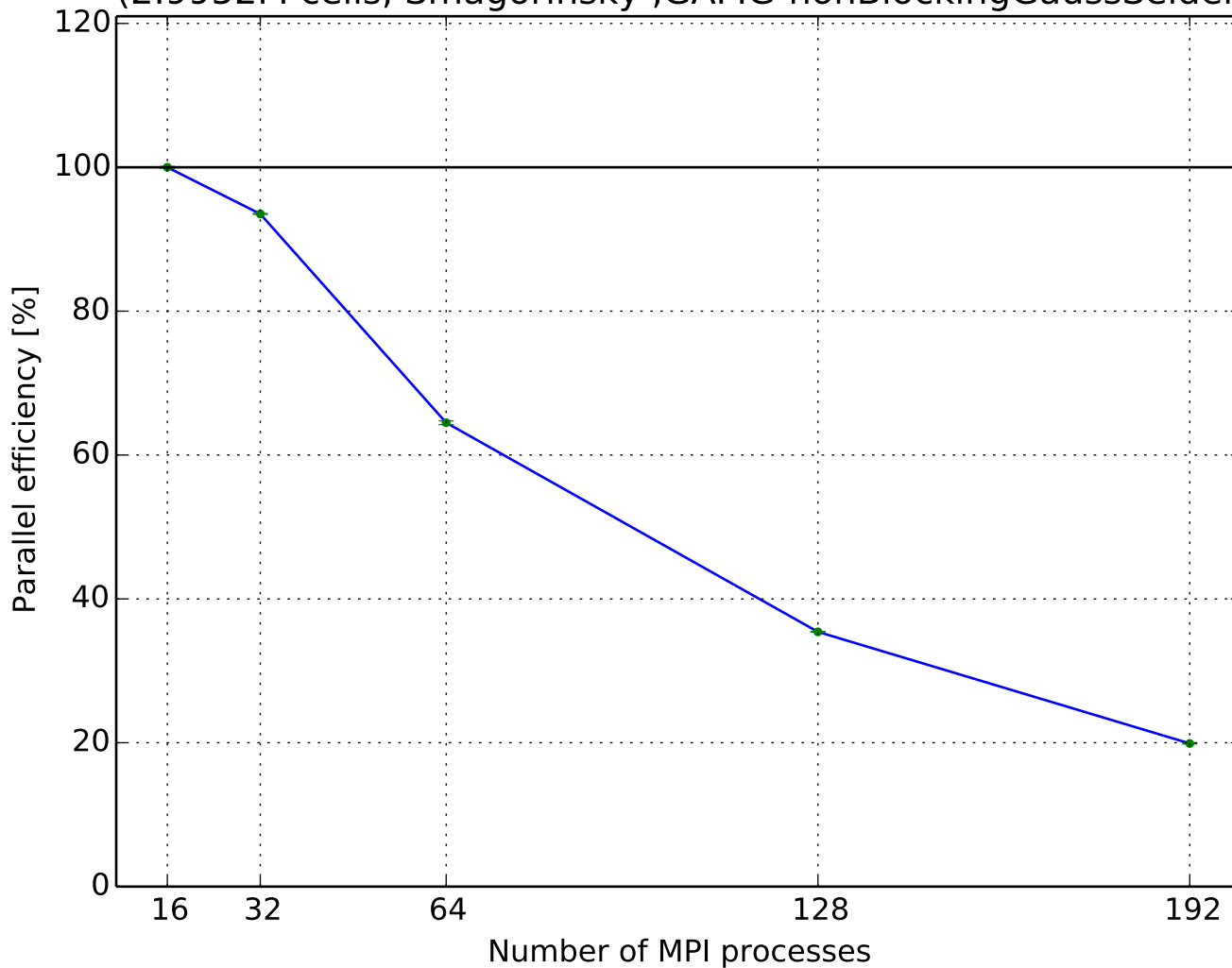
Execution time per time step
(2.9952M cells, Smagorinsky ,GAMG-nonBlockingGaussSeidel)



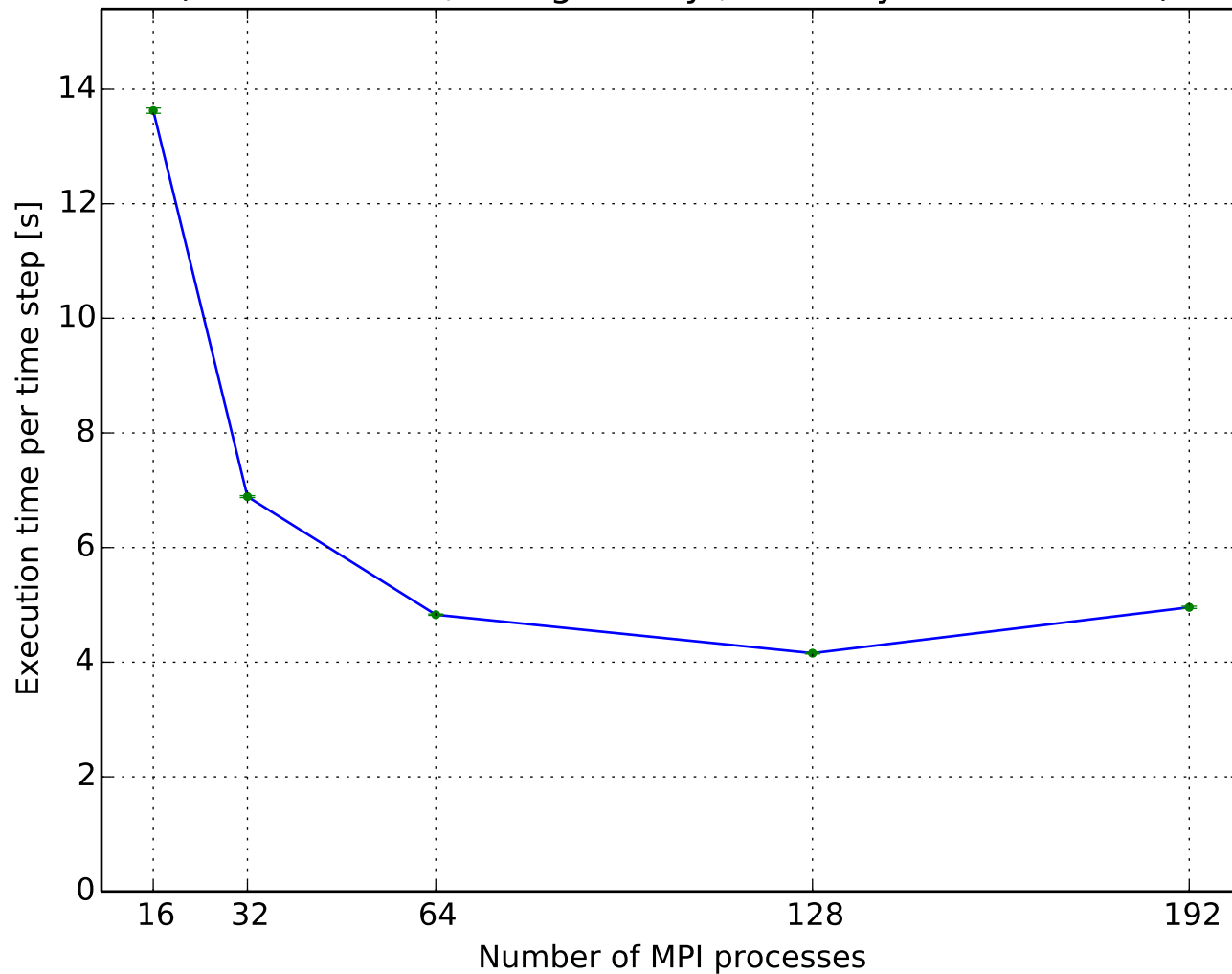
Speedup ratio
(2.9952M cells, Smagorinsky ,GAMG-nonBlockingGaussSeidel)



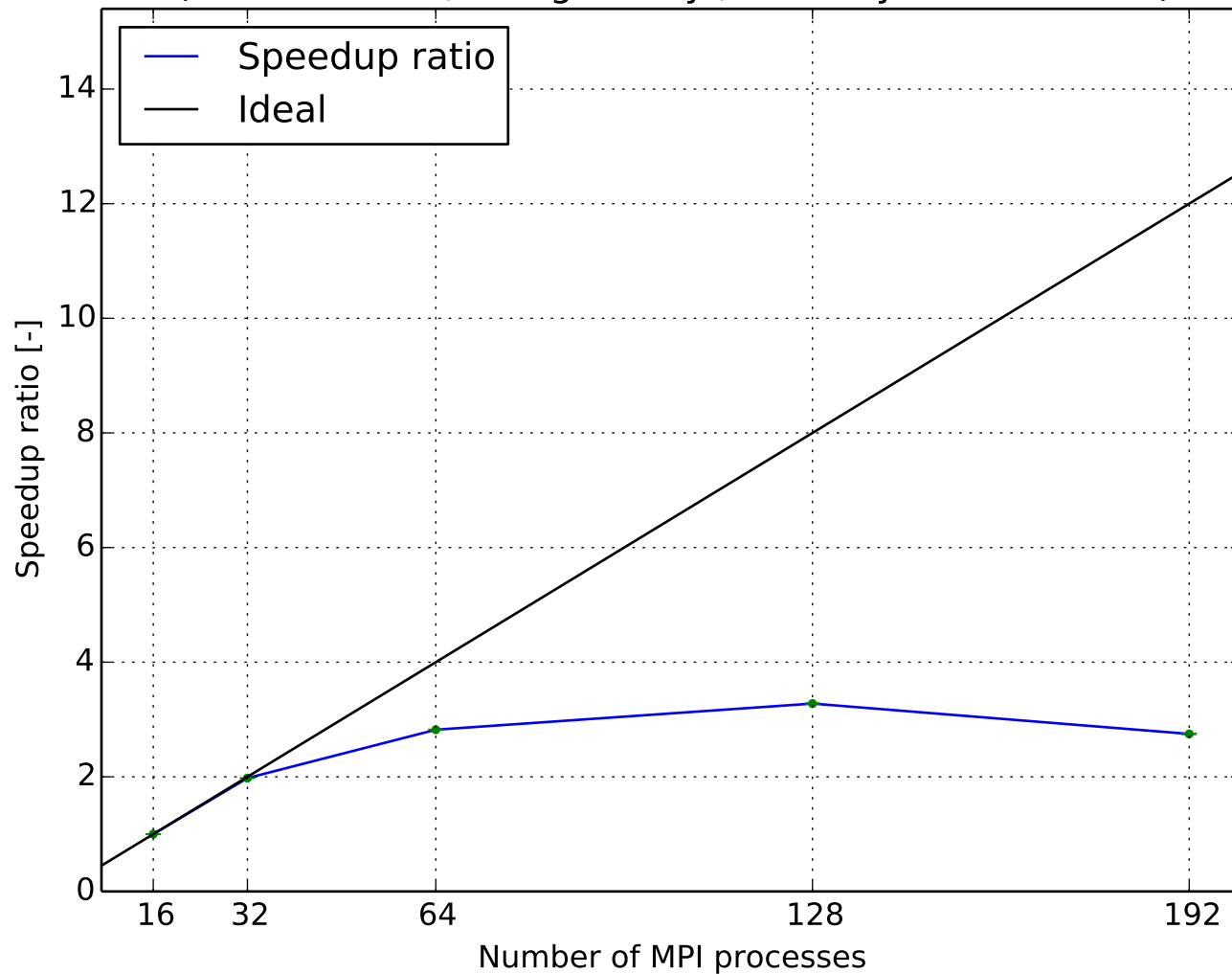
Parallel efficiency
(2.9952M cells, Smagorinsky ,GAMG-nonBlockingGaussSeidel)



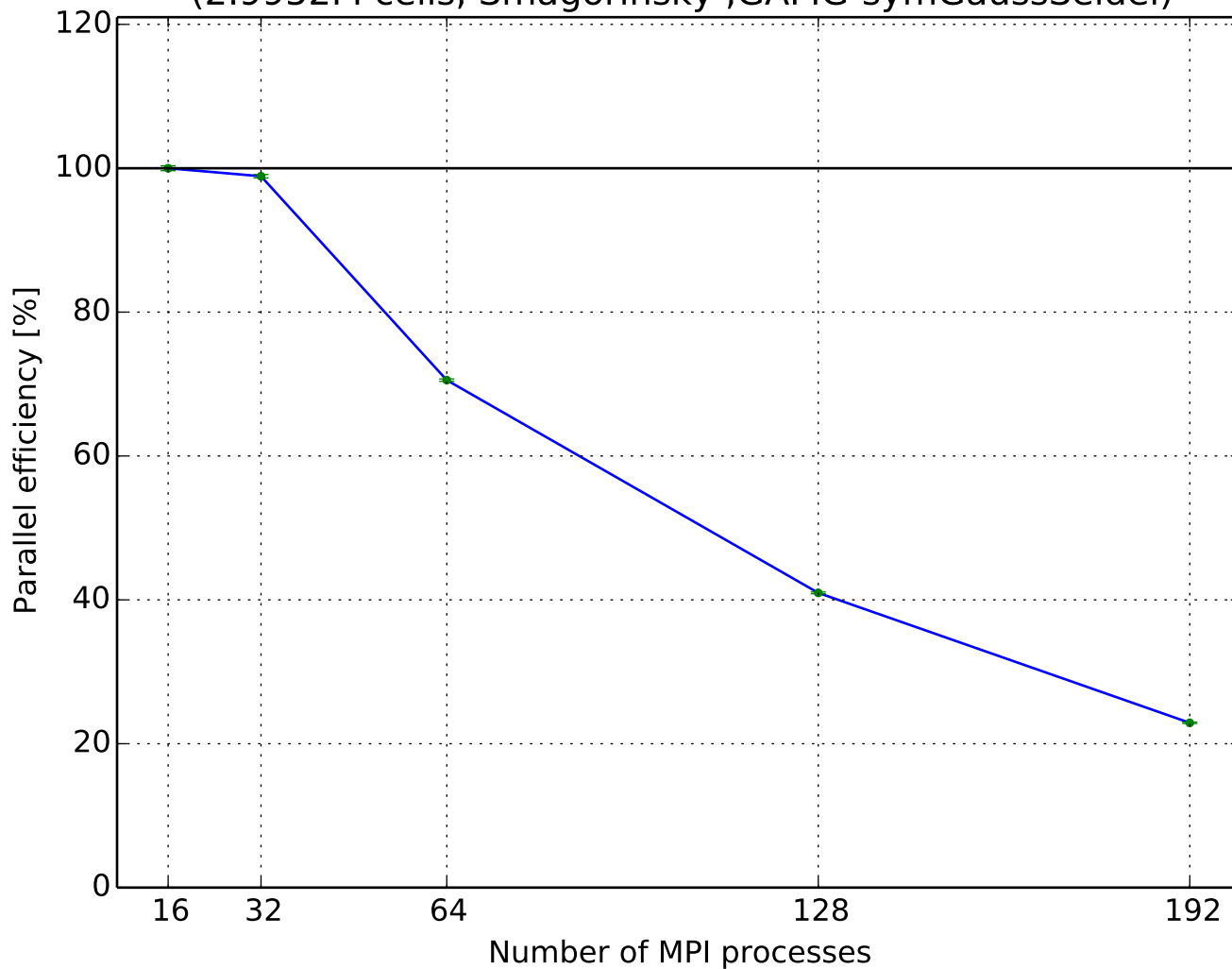
Execution time per time step
(2.9952M cells, Smagorinsky ,GAMG-symGaussSeidel)



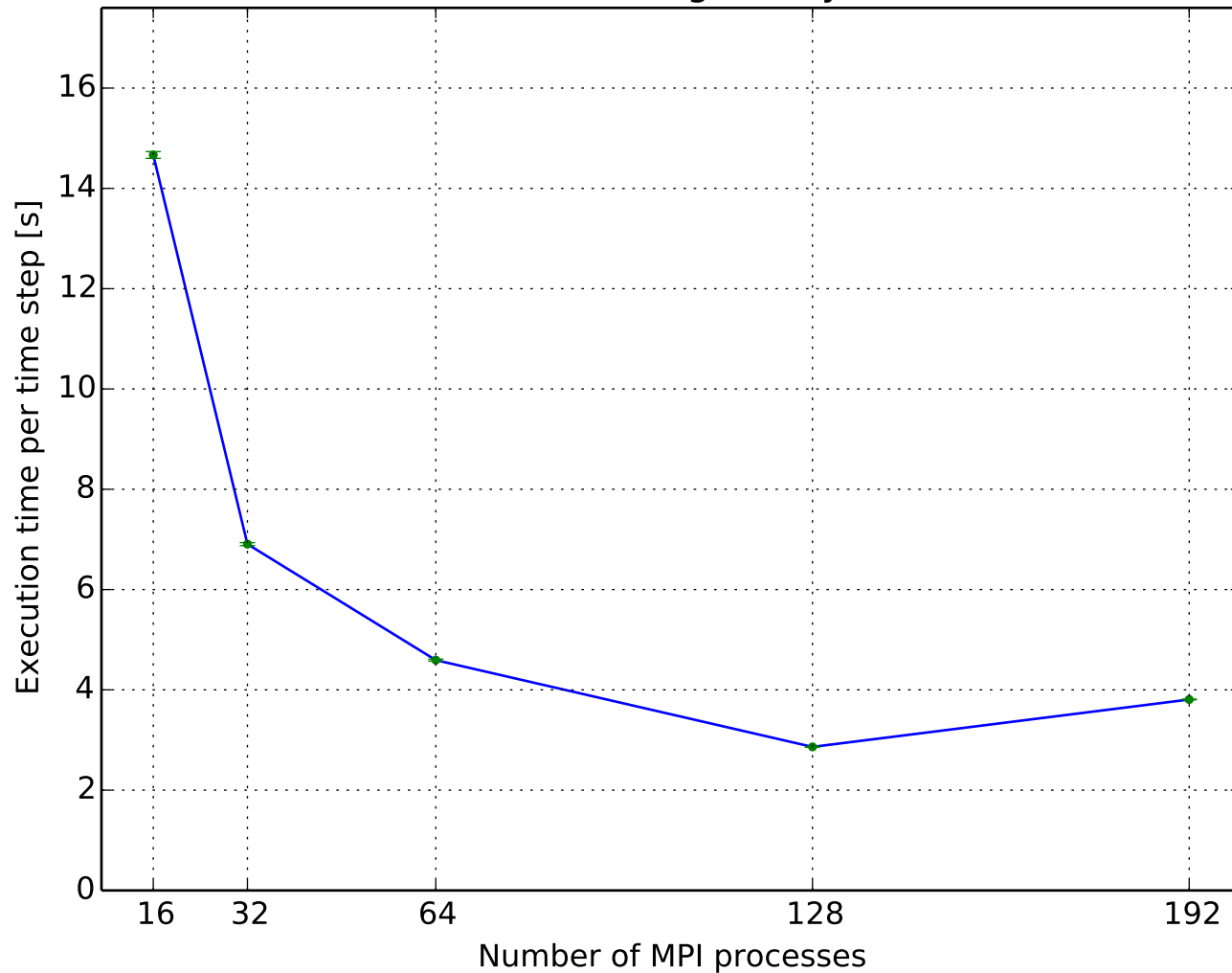
Speedup ratio
(2.9952M cells, Smagorinsky ,GAMG-symGaussSeidel)



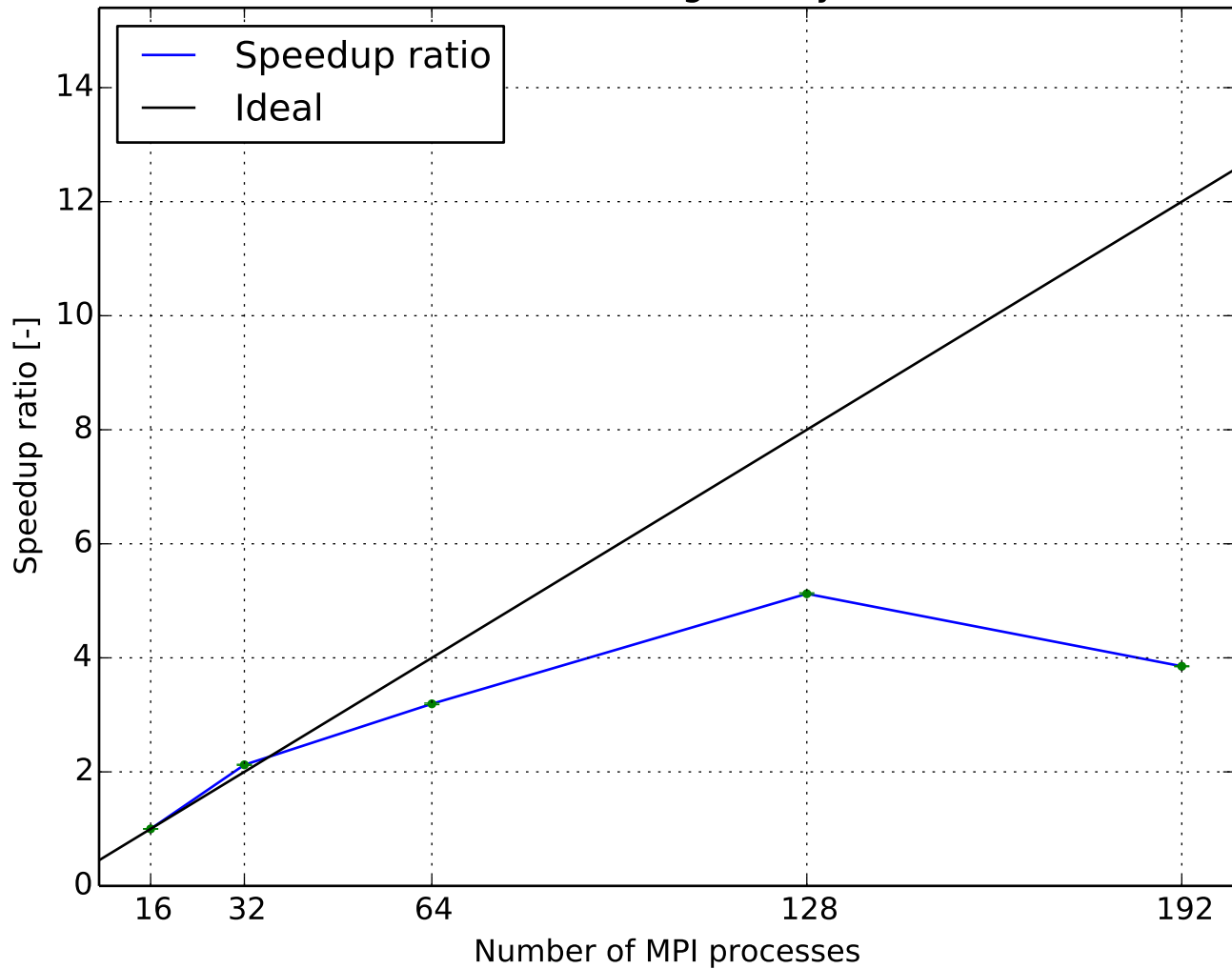
Parallel efficiency
(2.9952M cells, Smagorinsky ,GAMG-symGaussSeidel)



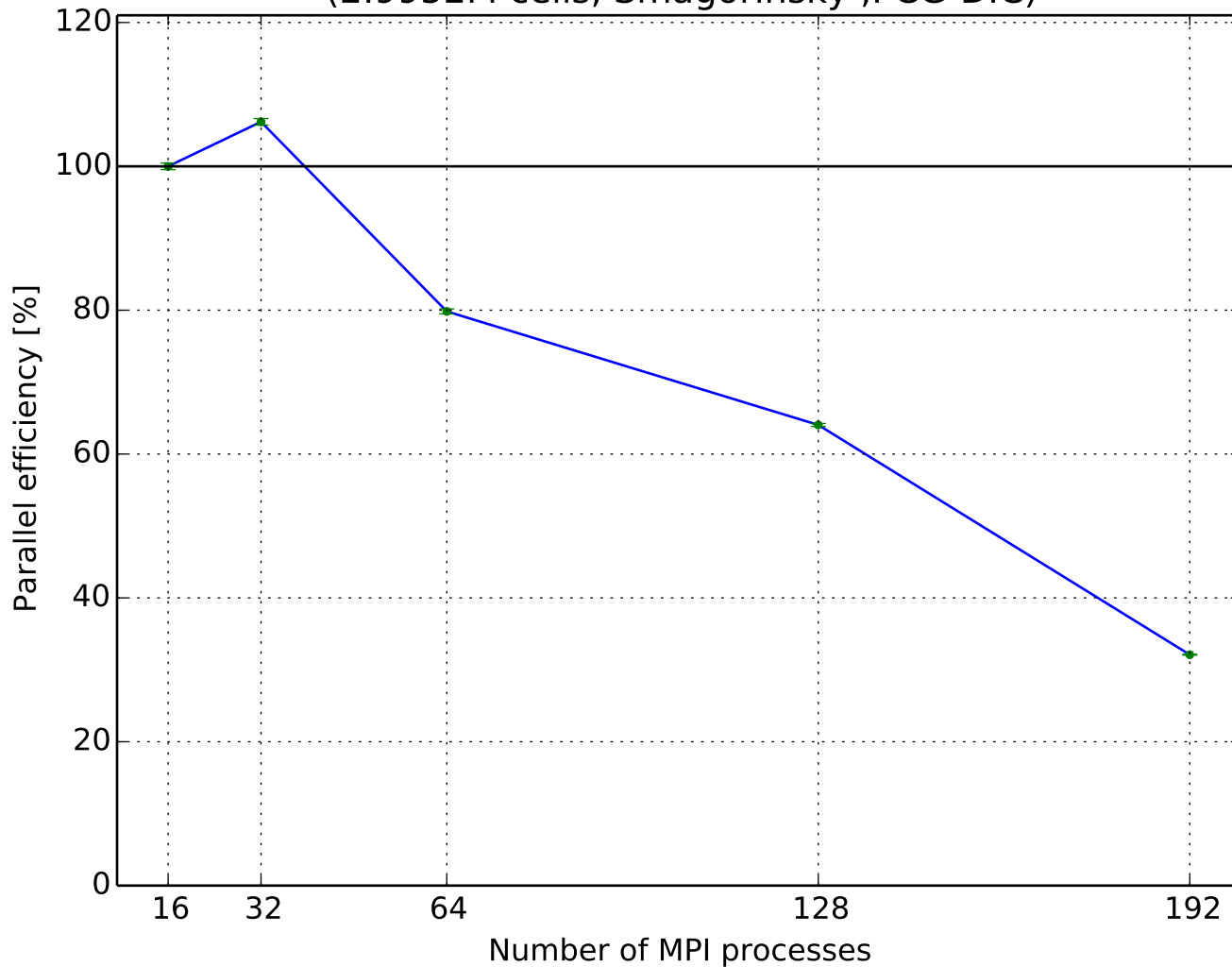
Execution time per time step
(2.9952M cells, Smagorinsky ,PCG-DIC)



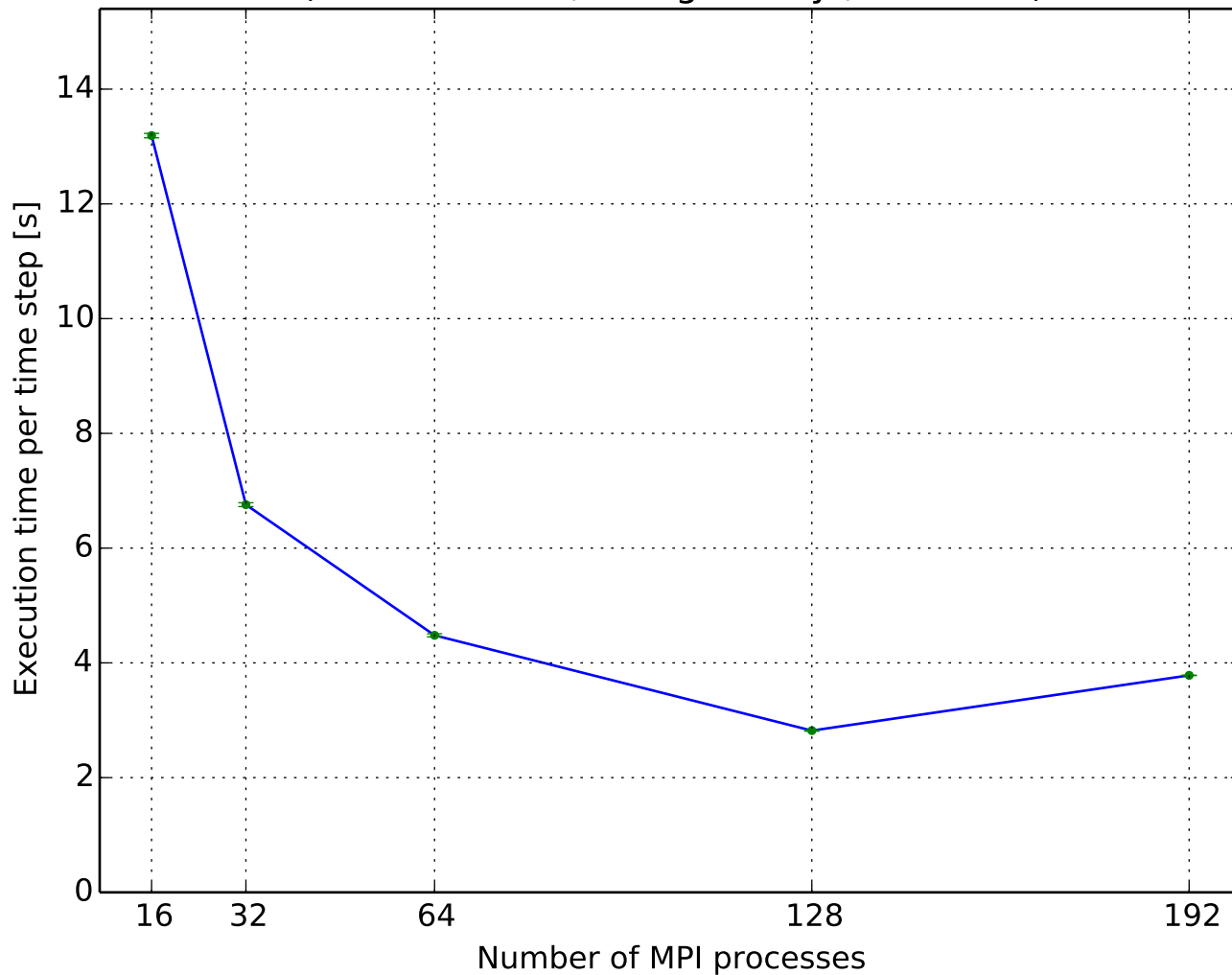
Speedup ratio
(2.9952M cells, Smagorinsky ,PCG-DIC)



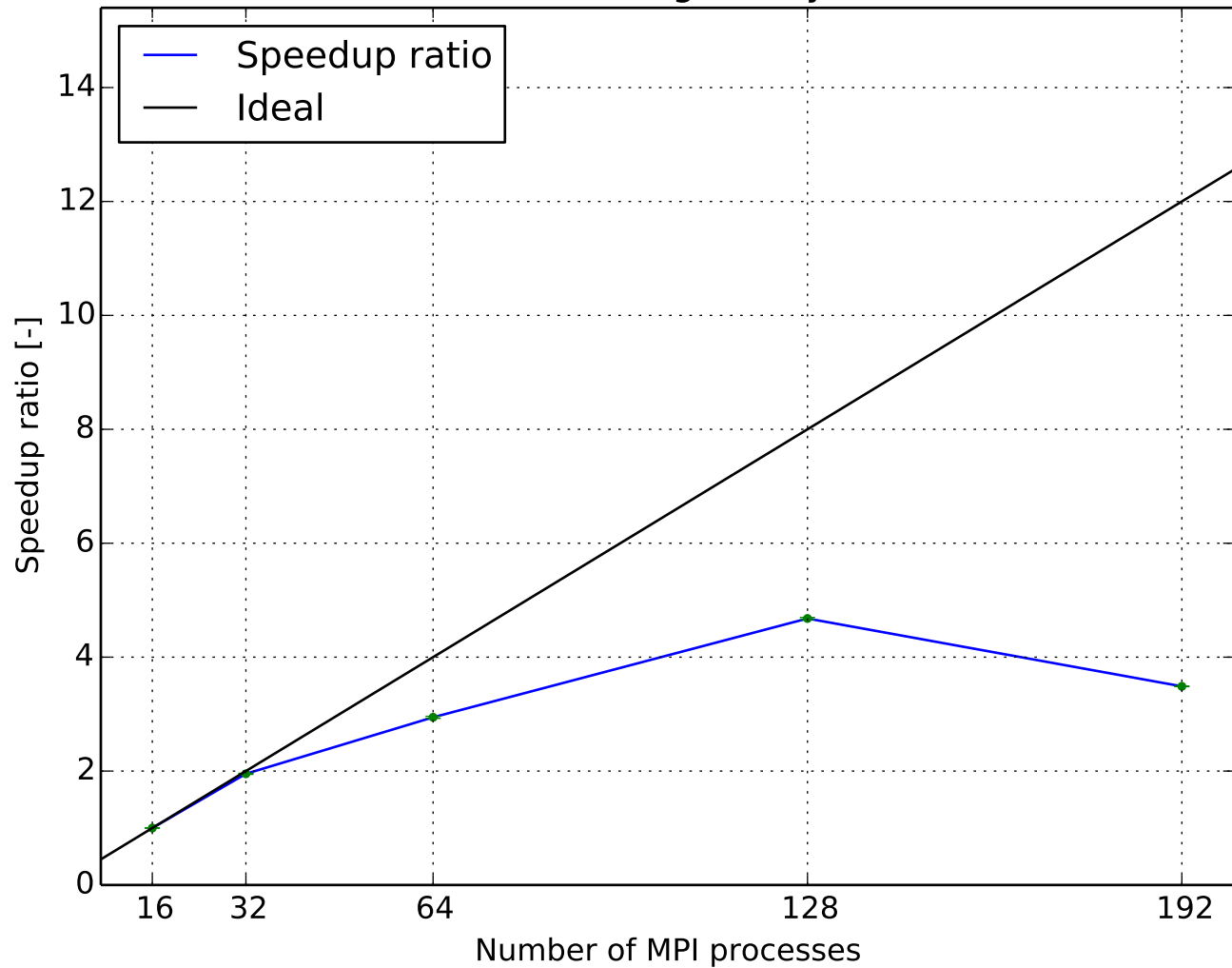
Parallel efficiency
(2.9952M cells, Smagorinsky ,PCG-DIC)



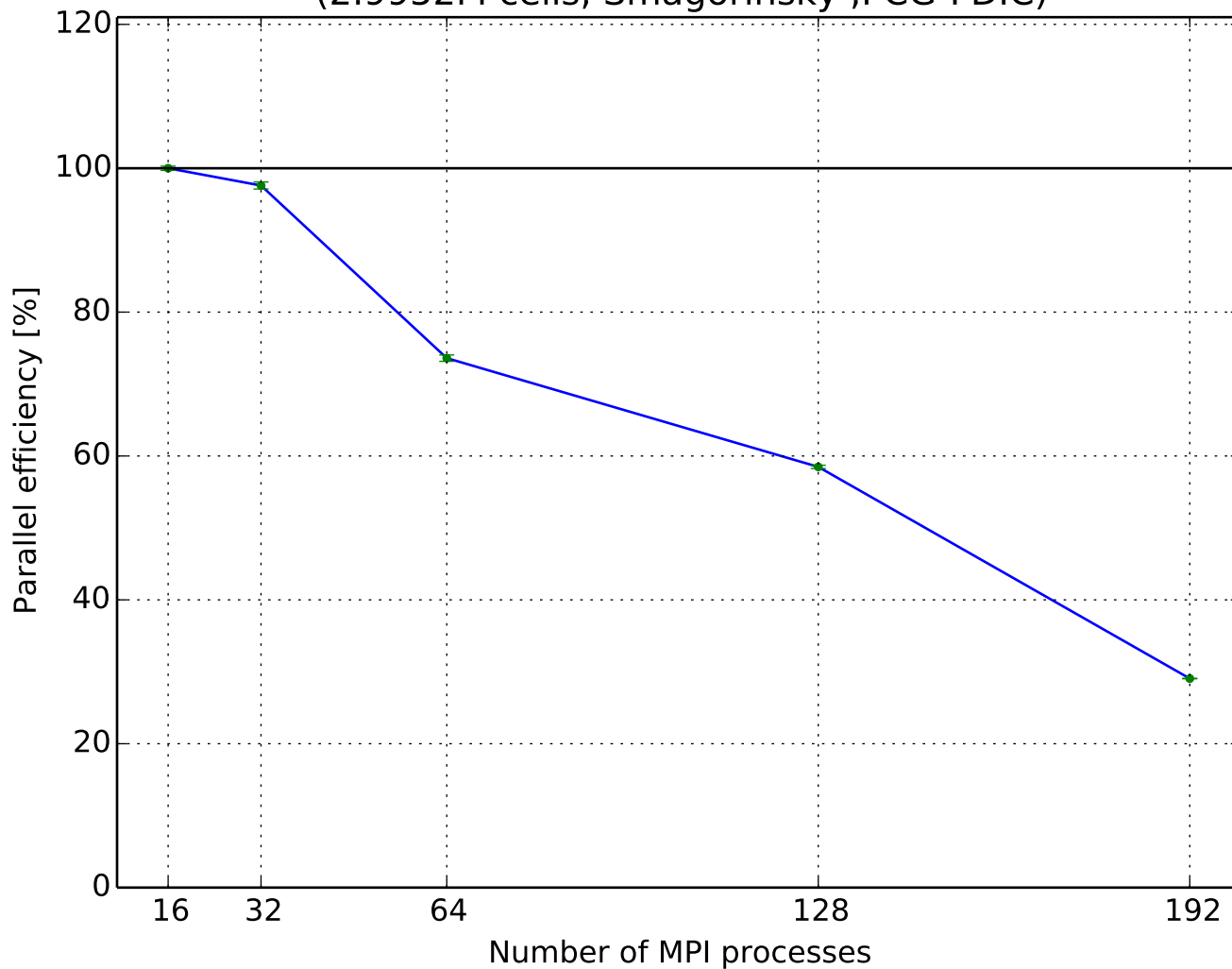
Execution time per time step
(2.9952M cells, Smagorinsky ,PCG-FDIC)



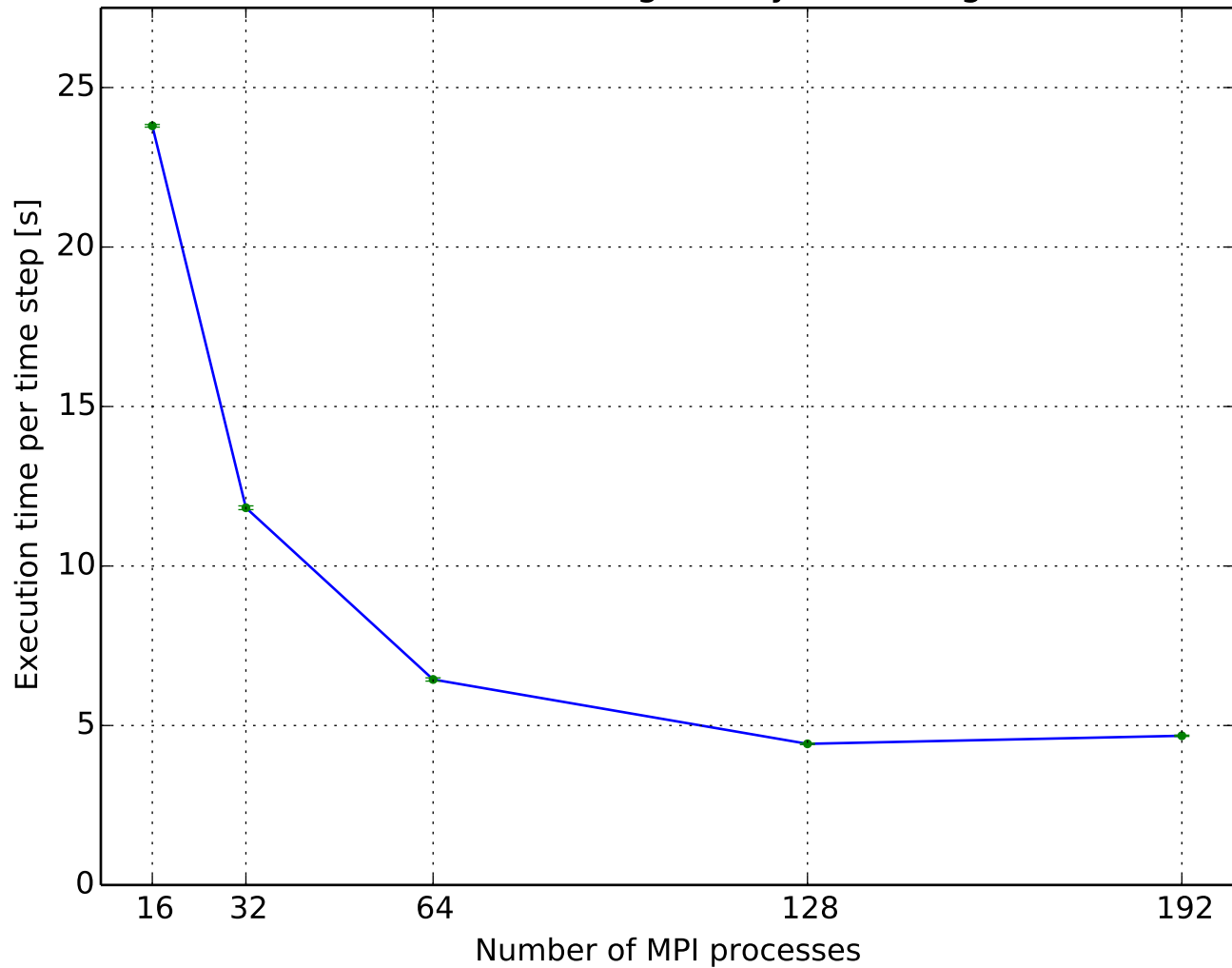
Speedup ratio
(2.9952M cells, Smagorinsky ,PCG-FDIC)



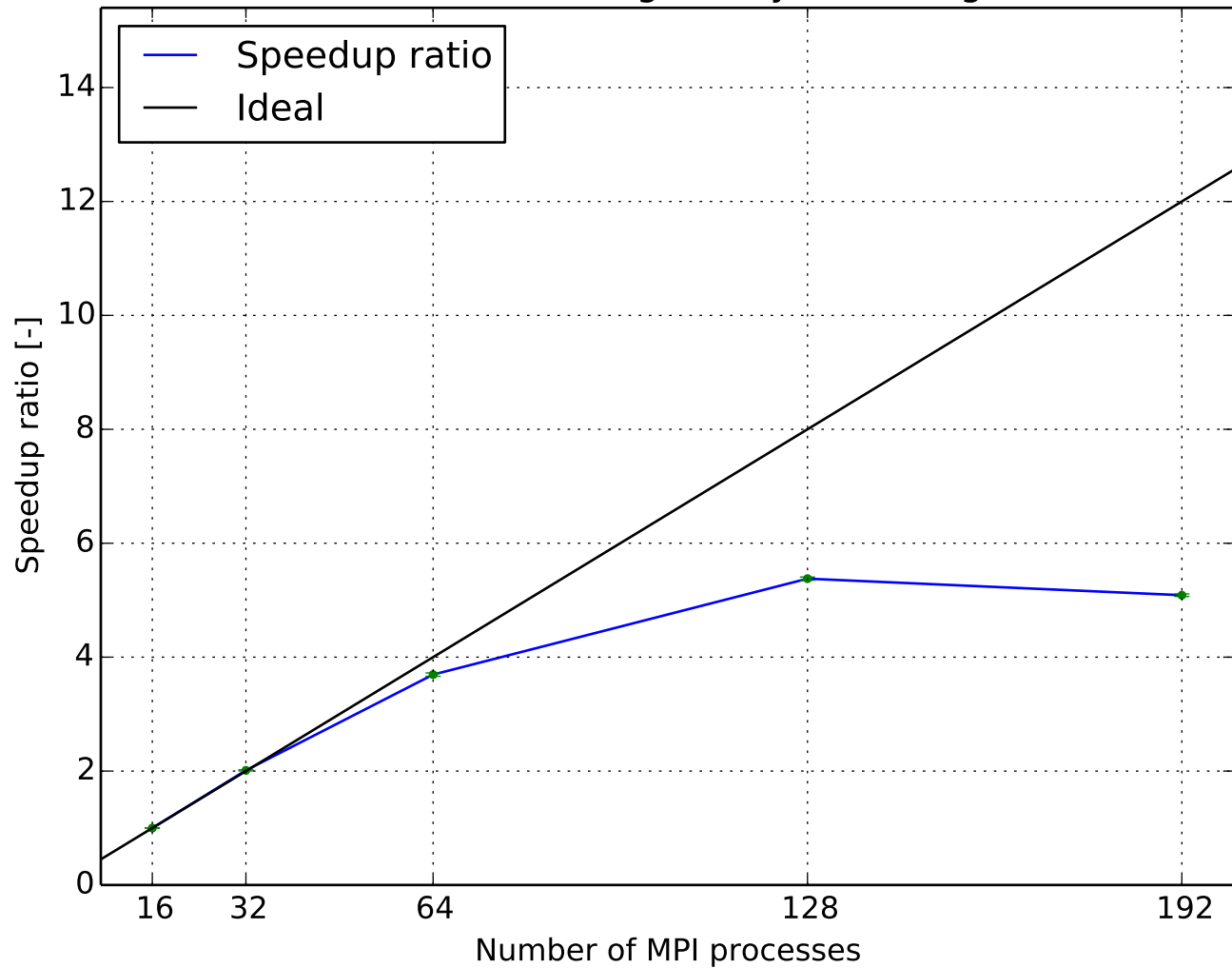
Parallel efficiency
(2.9952M cells, Smagorinsky ,PCG-FDIC)



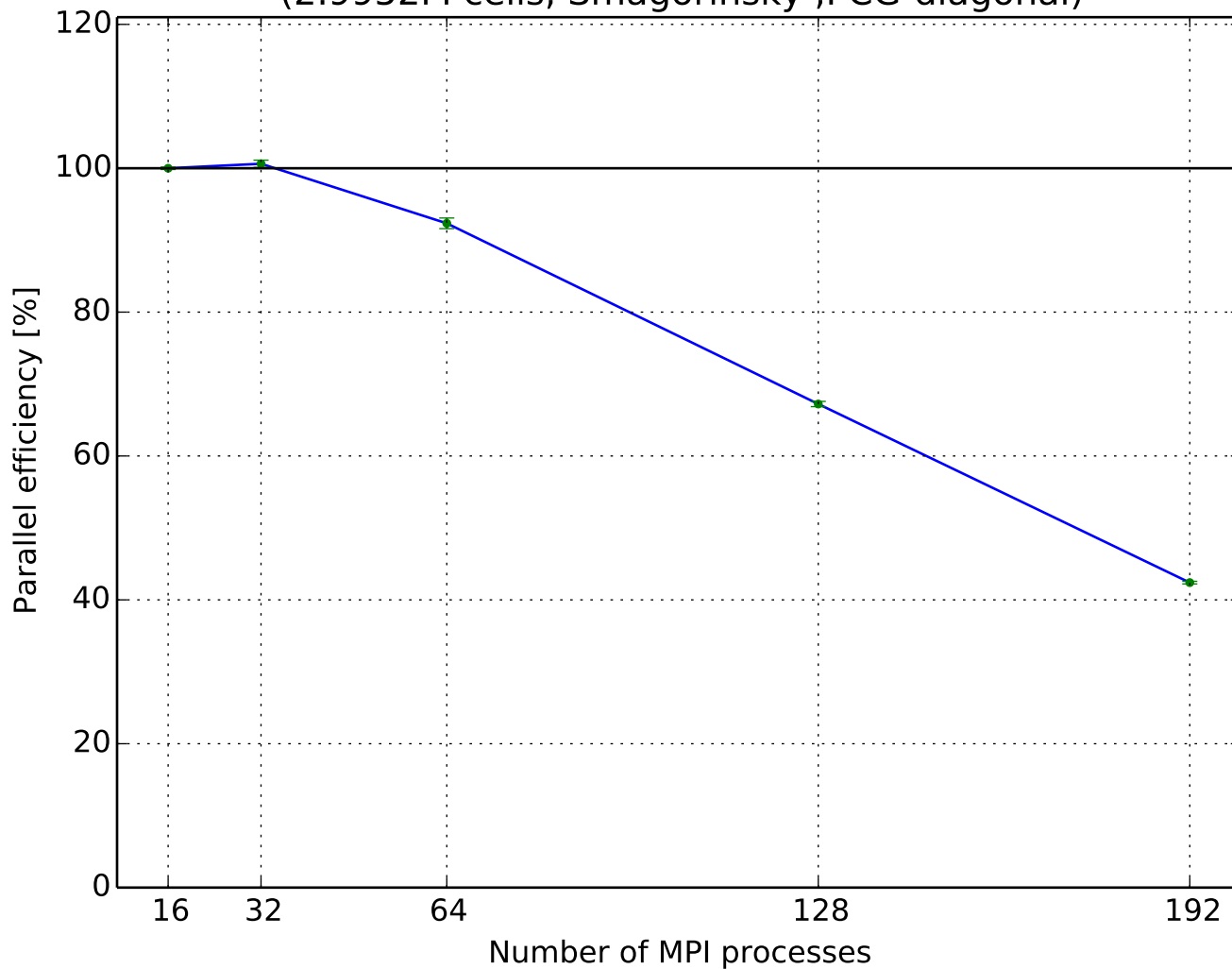
Execution time per time step
(2.9952M cells, Smagorinsky ,PCG-diagonal)



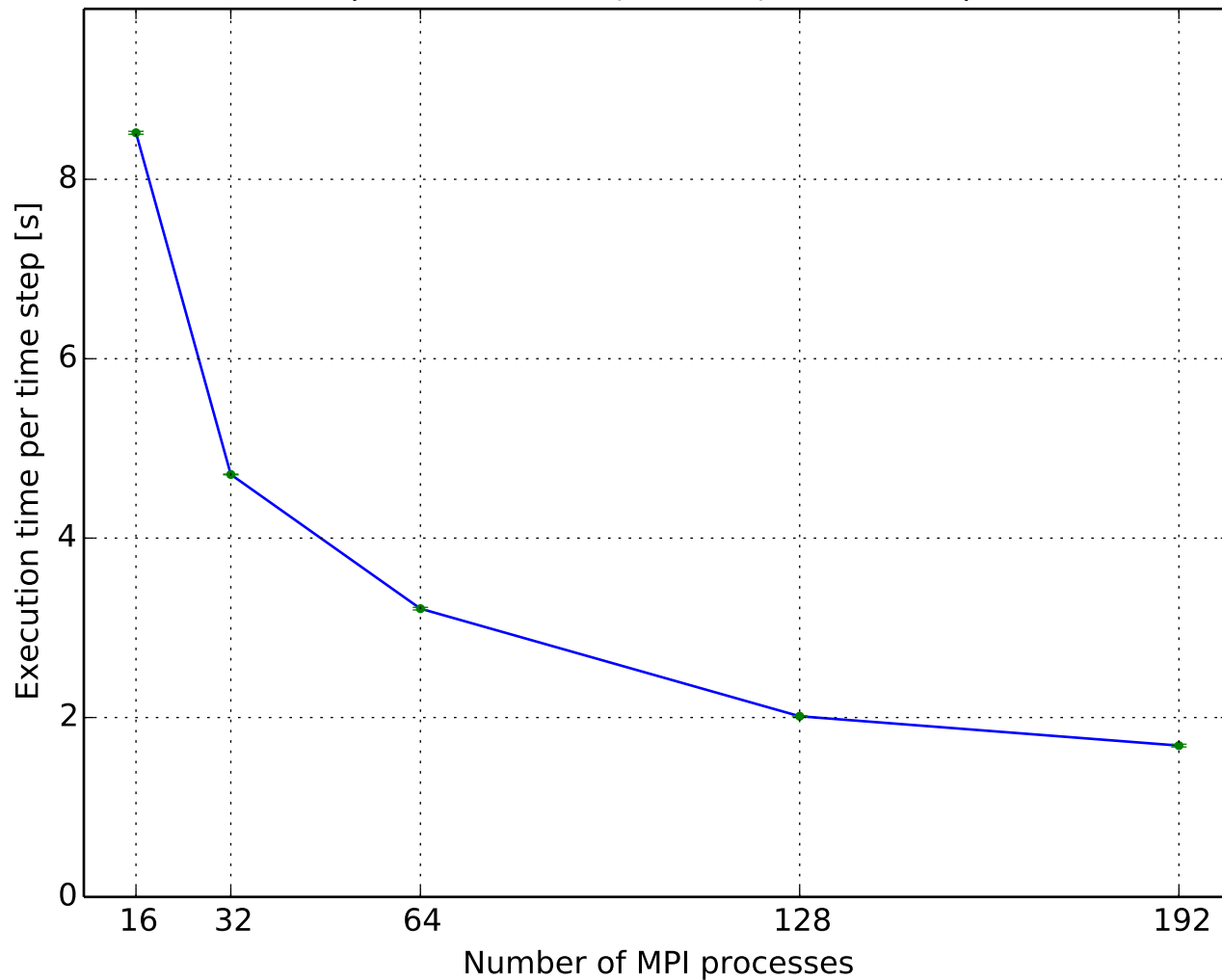
Speedup ratio
(2.9952M cells, Smagorinsky ,PCG-diagonal)



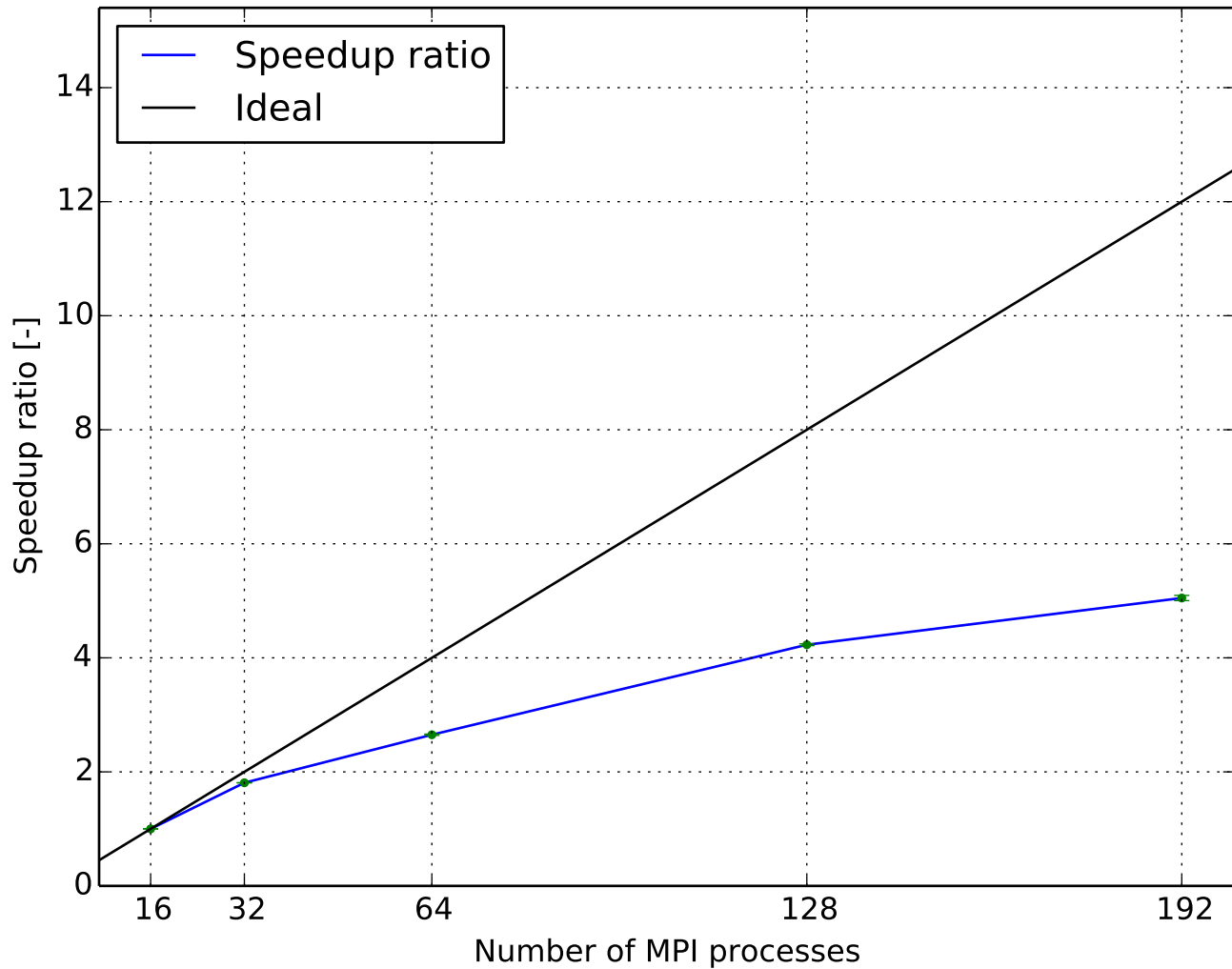
Parallel efficiency
(2.9952M cells, Smagorinsky ,PCG-diagonal)



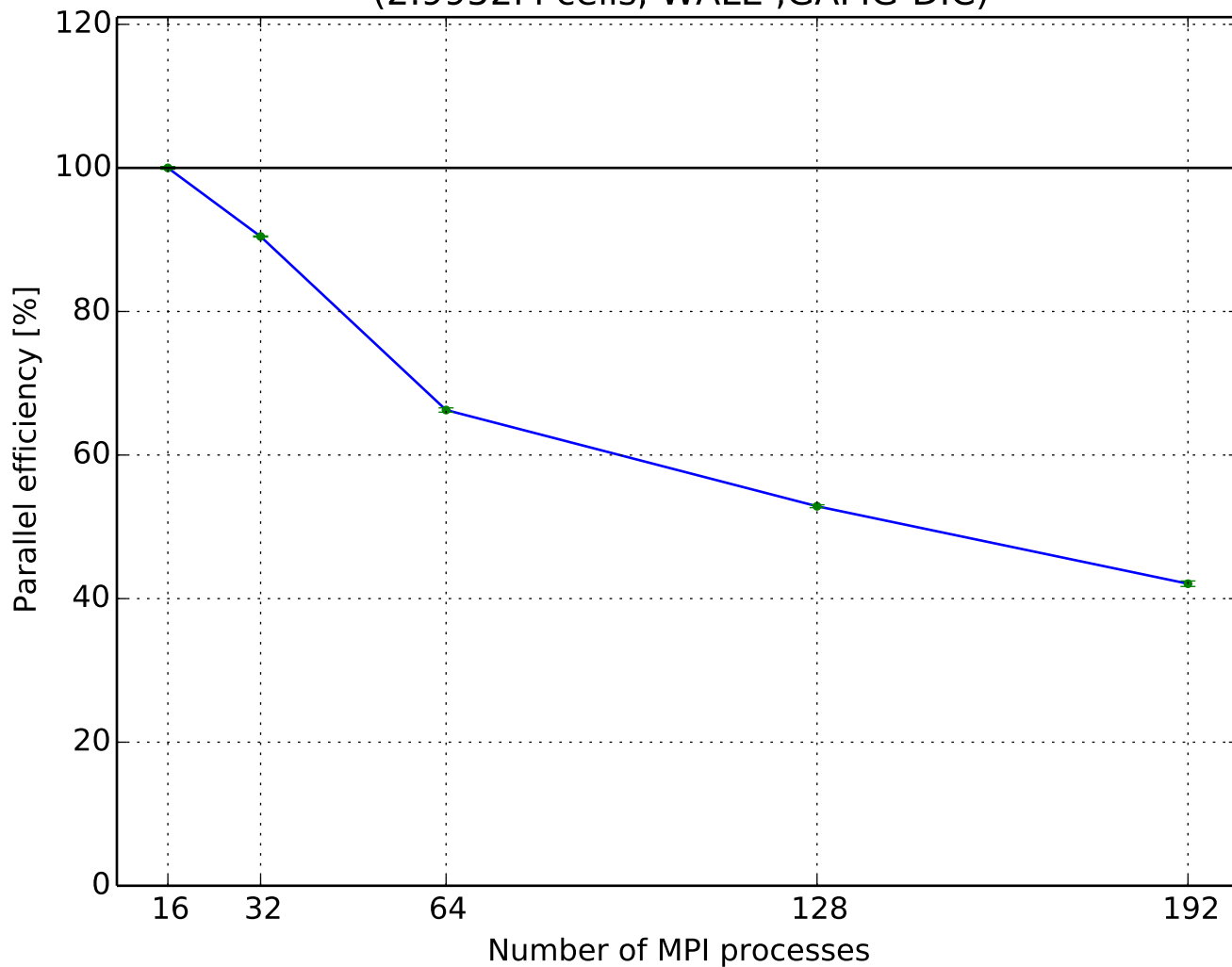
Execution time per time step
(2.9952M cells, WALE ,GAMG-DIC)



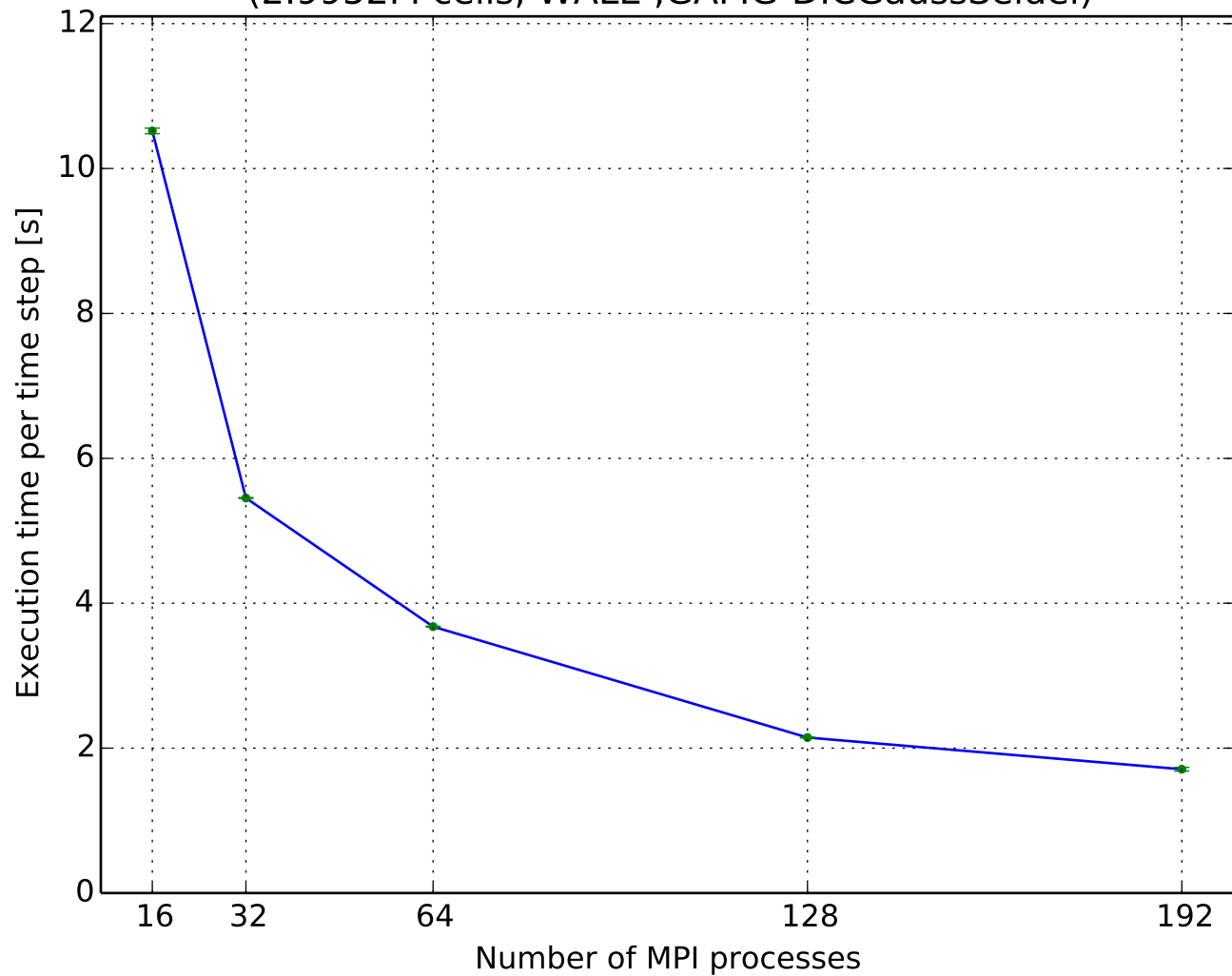
Speedup ratio
(2.9952M cells, WALE ,GAMG-DIC)



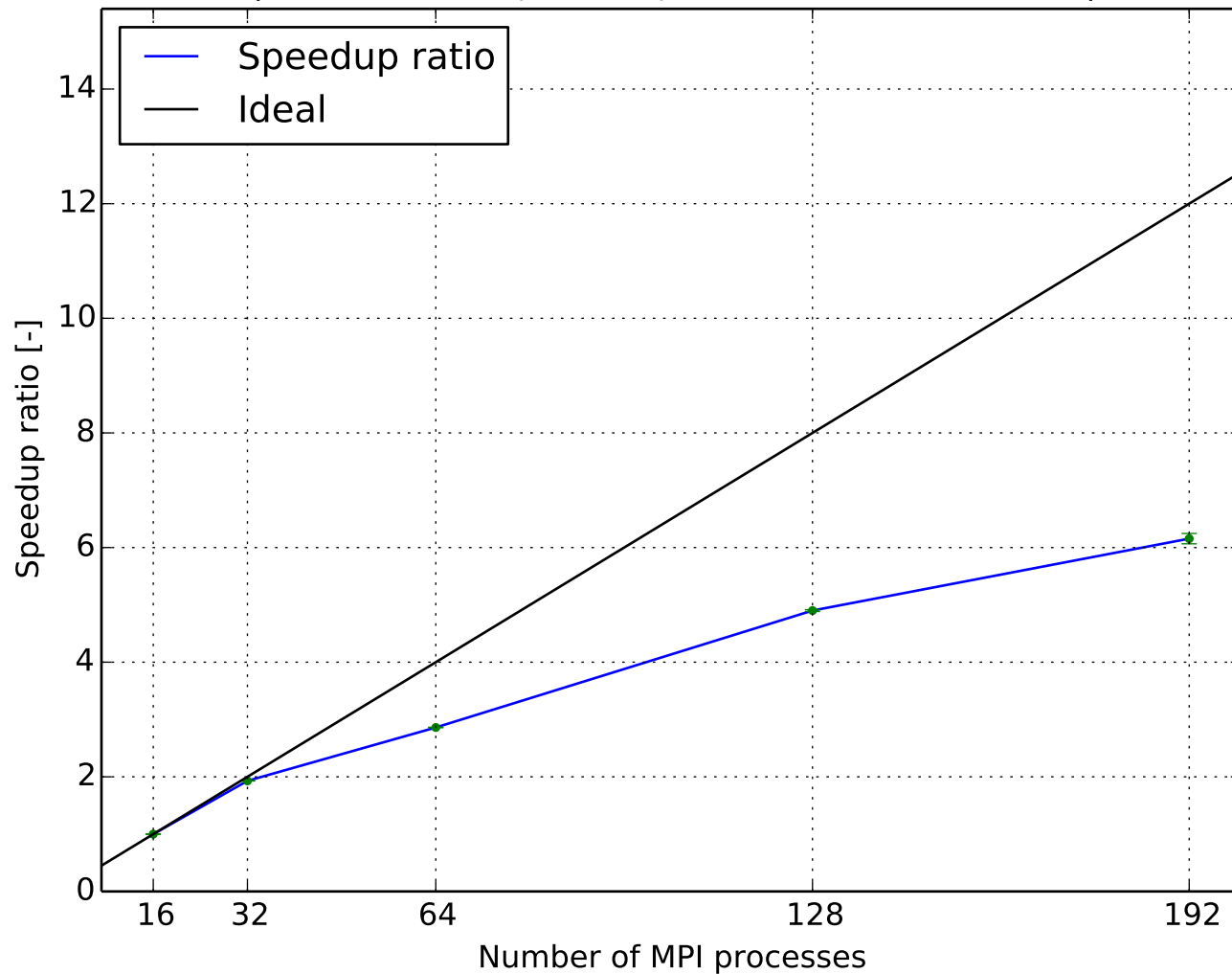
Parallel efficiency
(2.9952M cells, WALE ,GAMG-DIC)



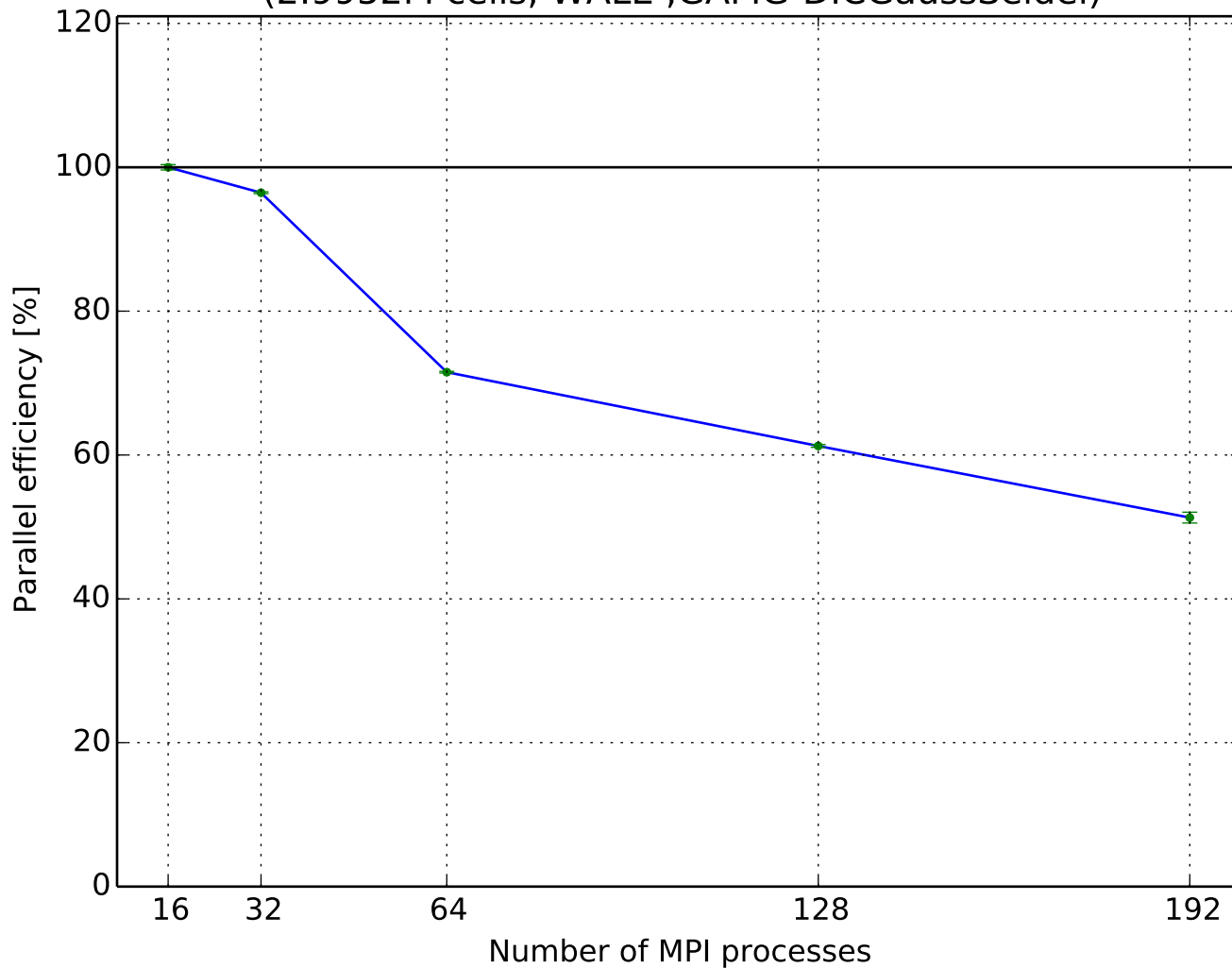
Execution time per time step
(2.9952M cells, WALE ,GAMG-DICGaussSeidel)



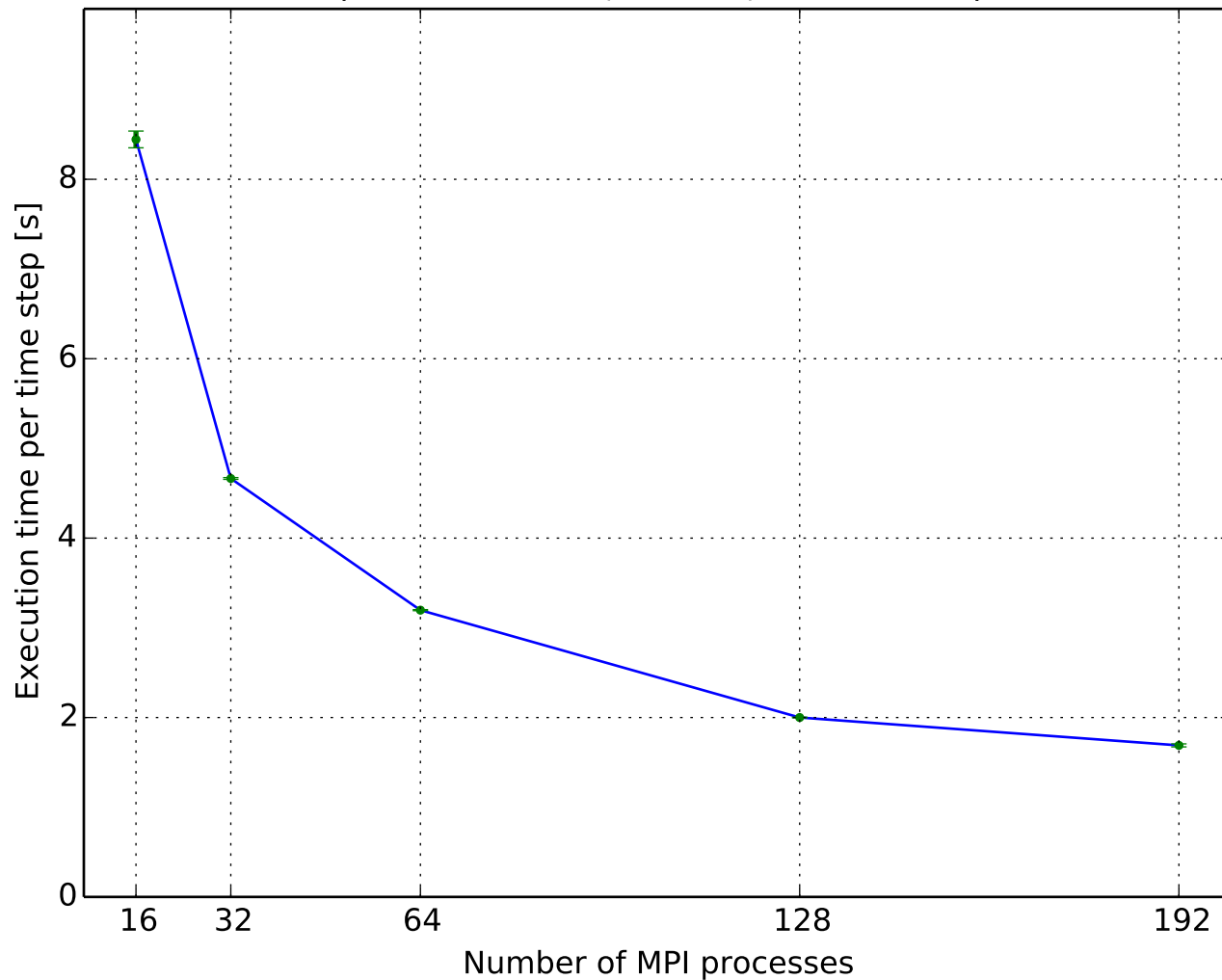
Speedup ratio
(2.9952M cells, WALE ,GAMG-DICGaussSeidel)



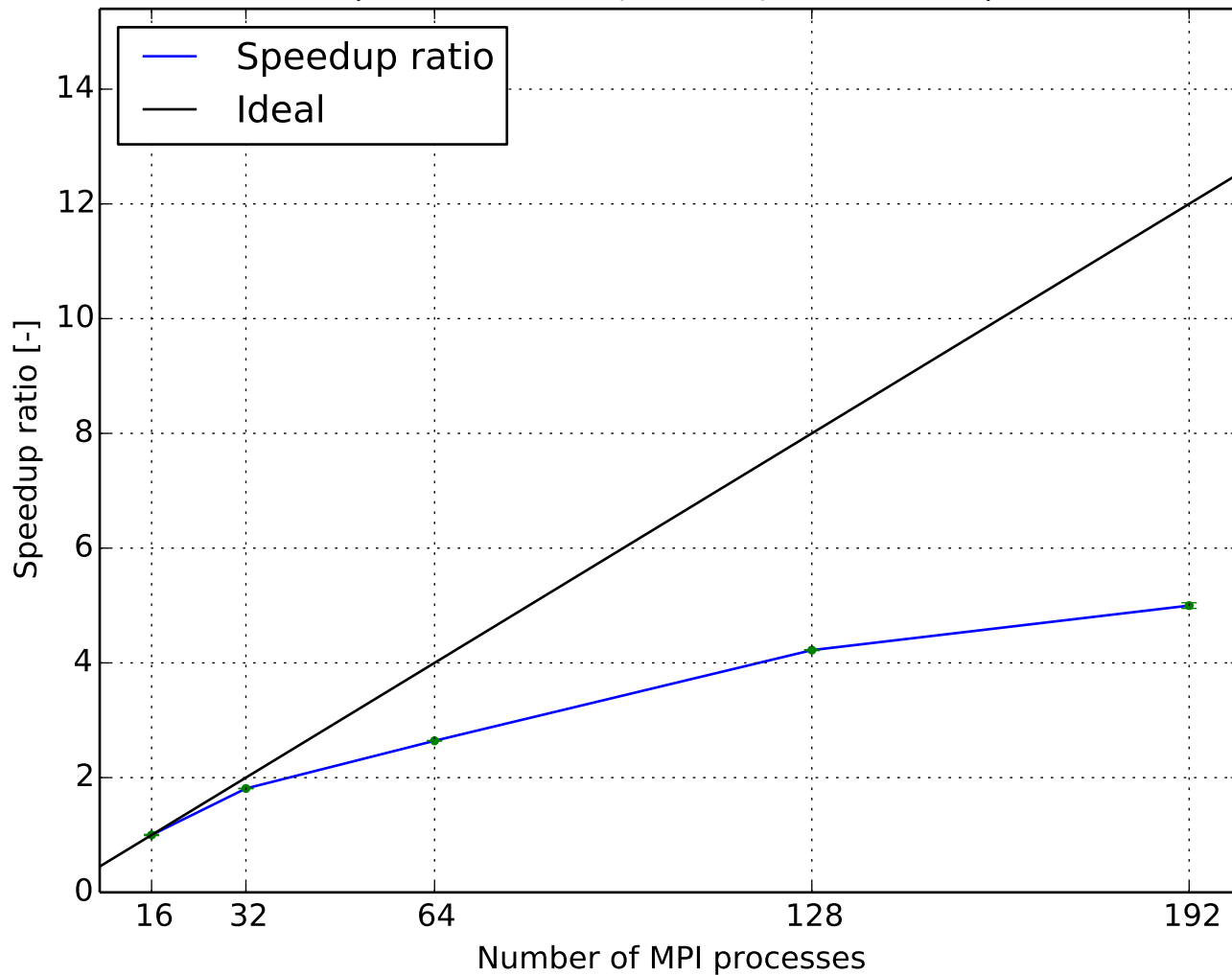
Parallel efficiency
(2.9952M cells, WALE ,GAMG-DICGaussSeidel)



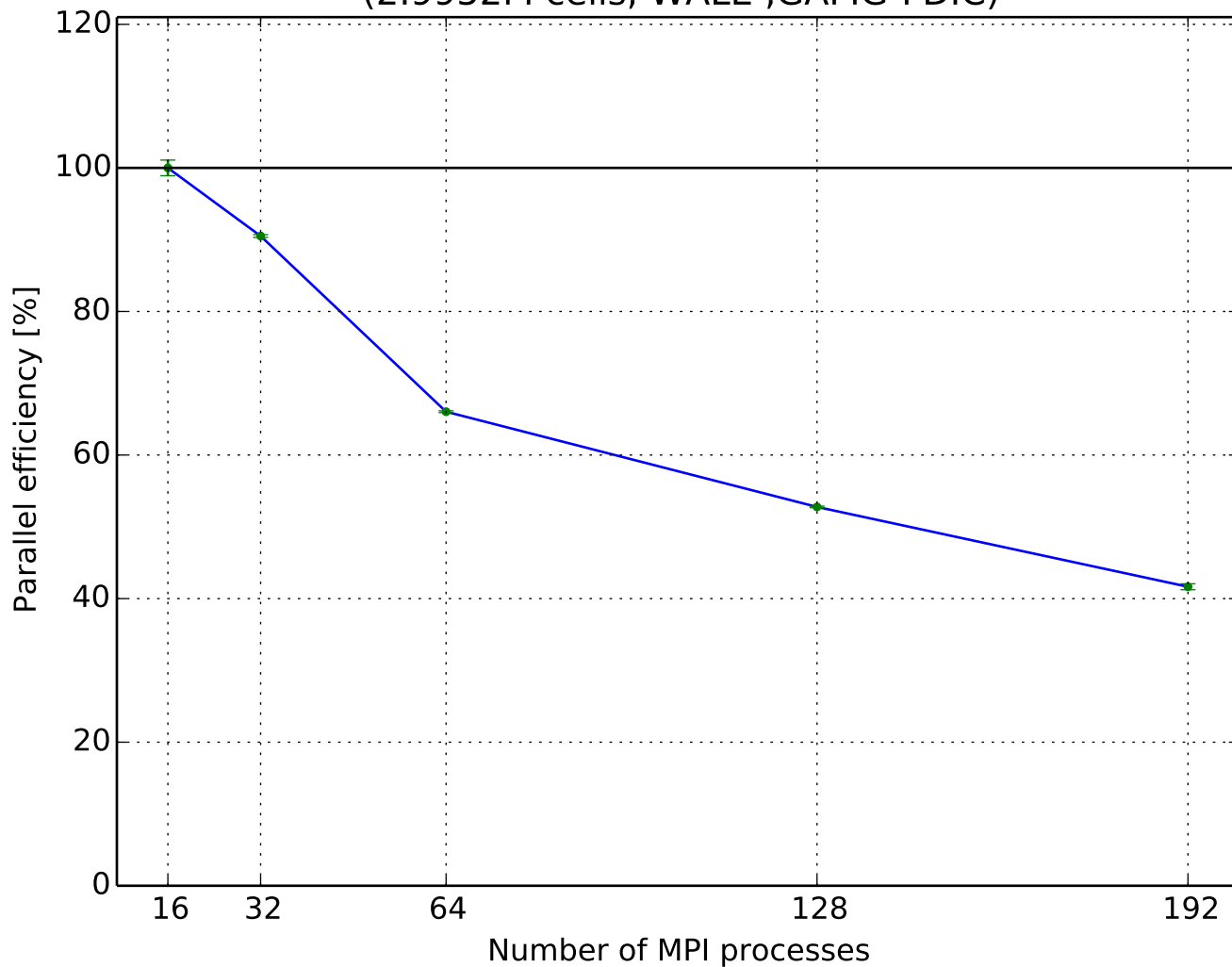
Execution time per time step
(2.9952M cells, WALE ,GAMG-FDIC)



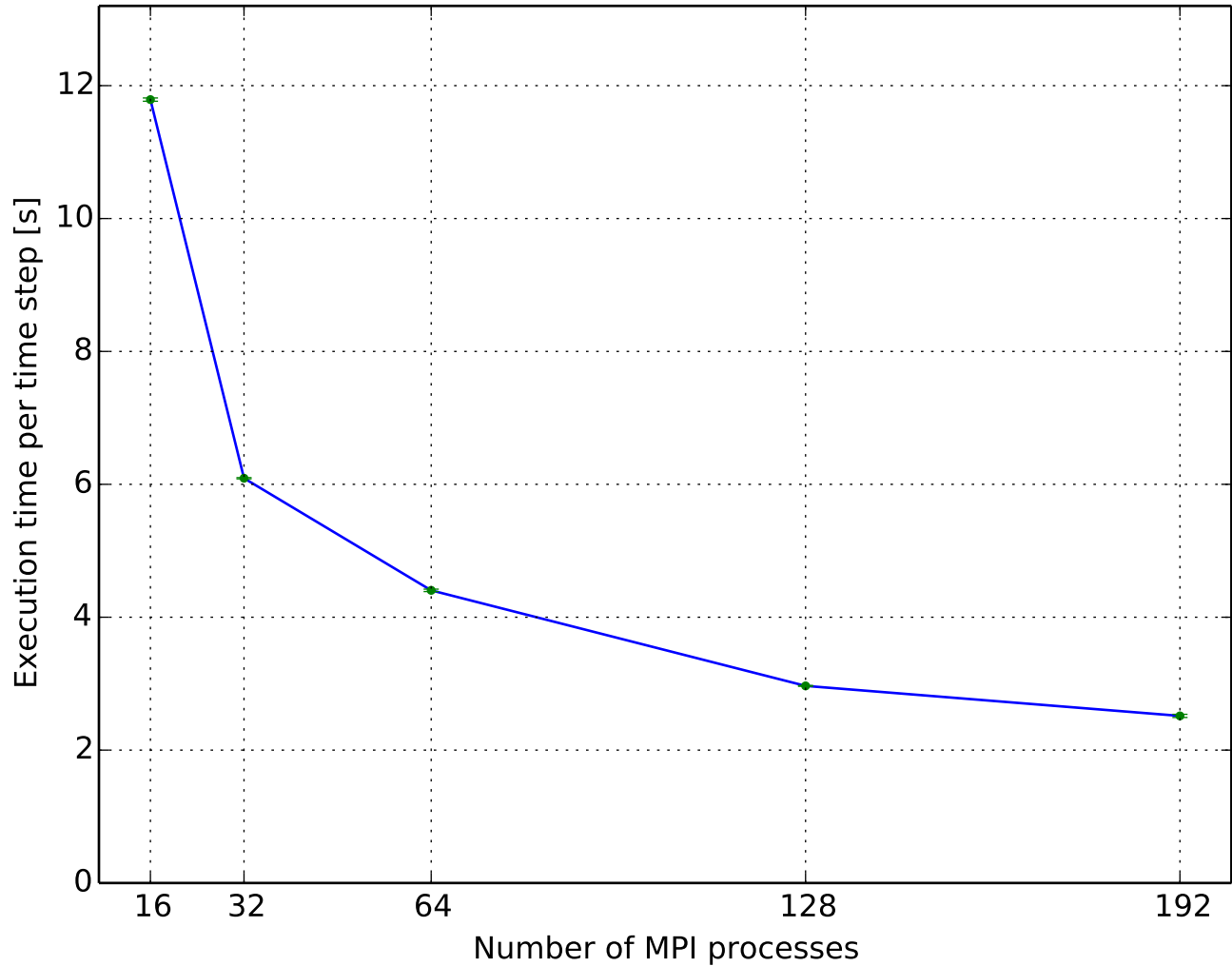
Speedup ratio
(2.9952M cells, WALE ,GAMG-FDIC)



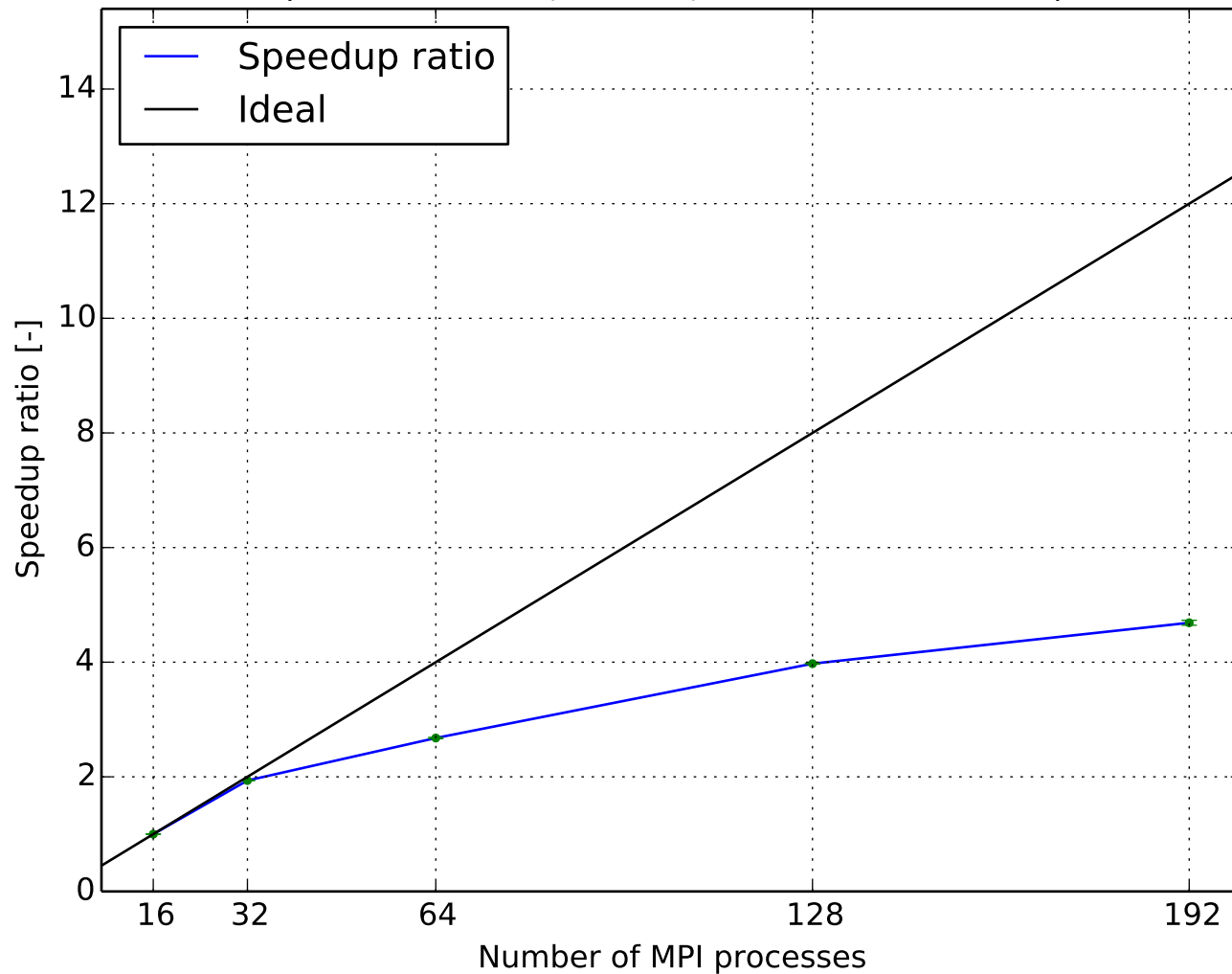
Parallel efficiency
(2.9952M cells, WALE ,GAMG-FDIC)



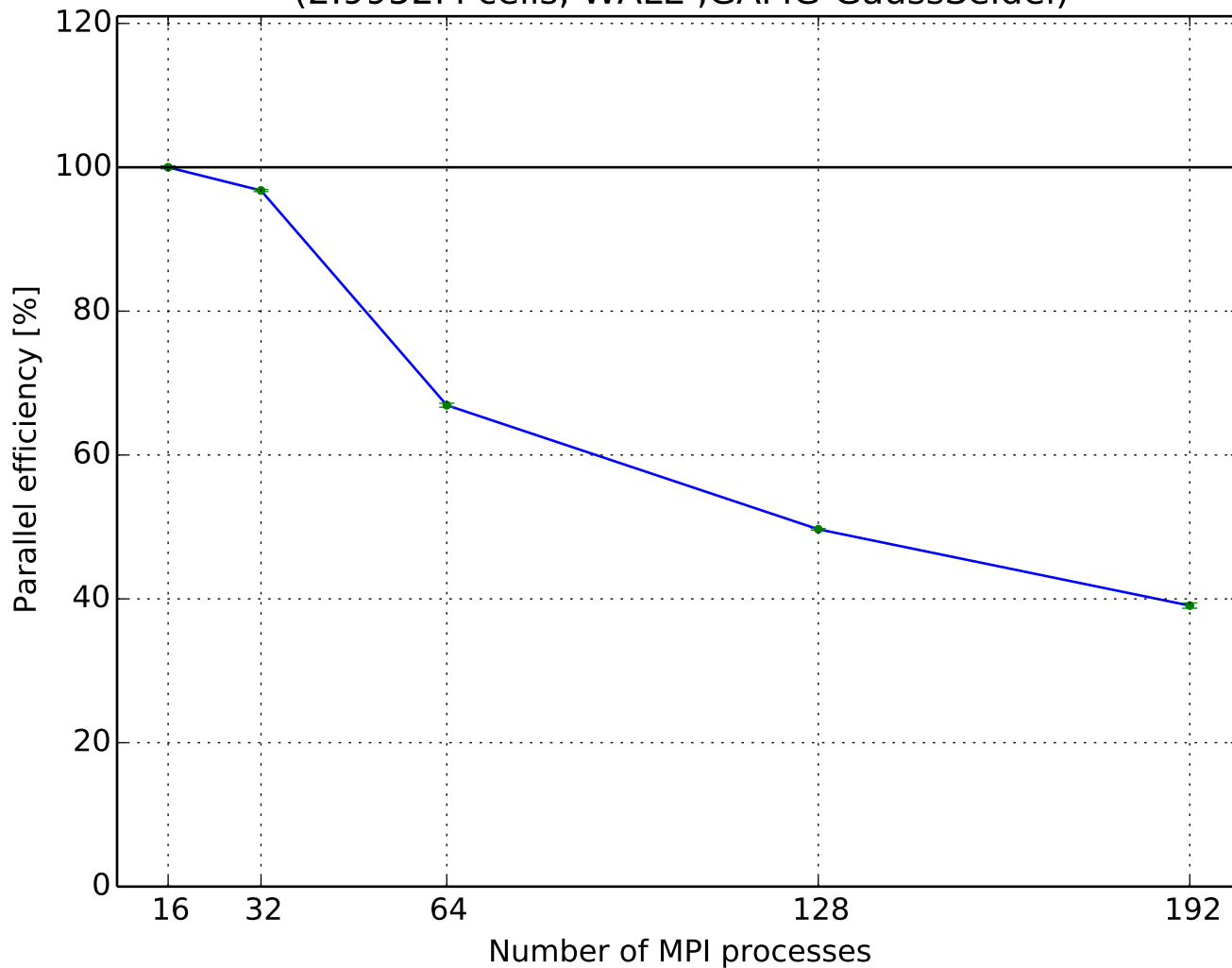
Execution time per time step
(2.9952M cells, WALE ,GAMG-GaussSeidel)



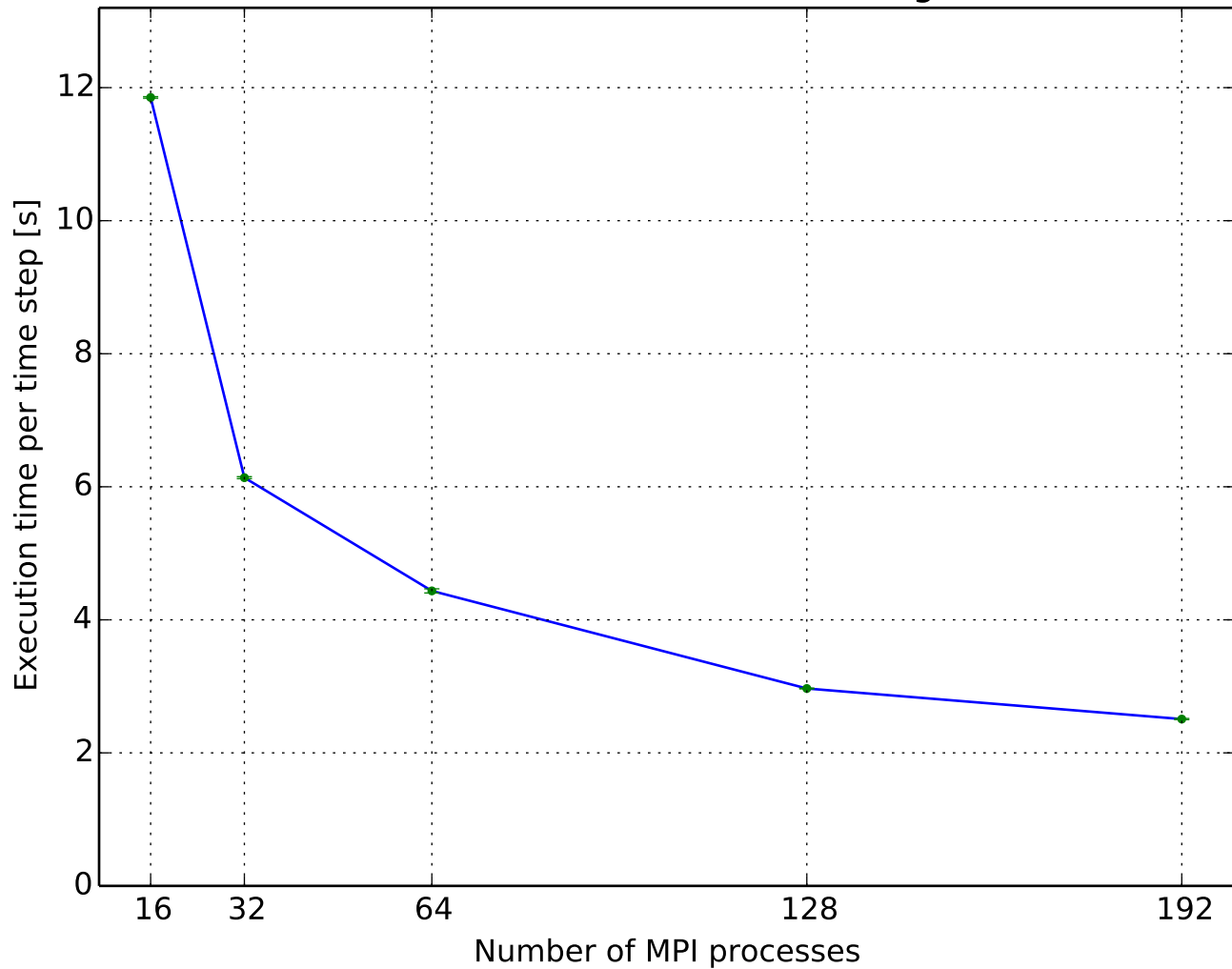
Speedup ratio
(2.9952M cells, WALE ,GAMG-GaussSeidel)



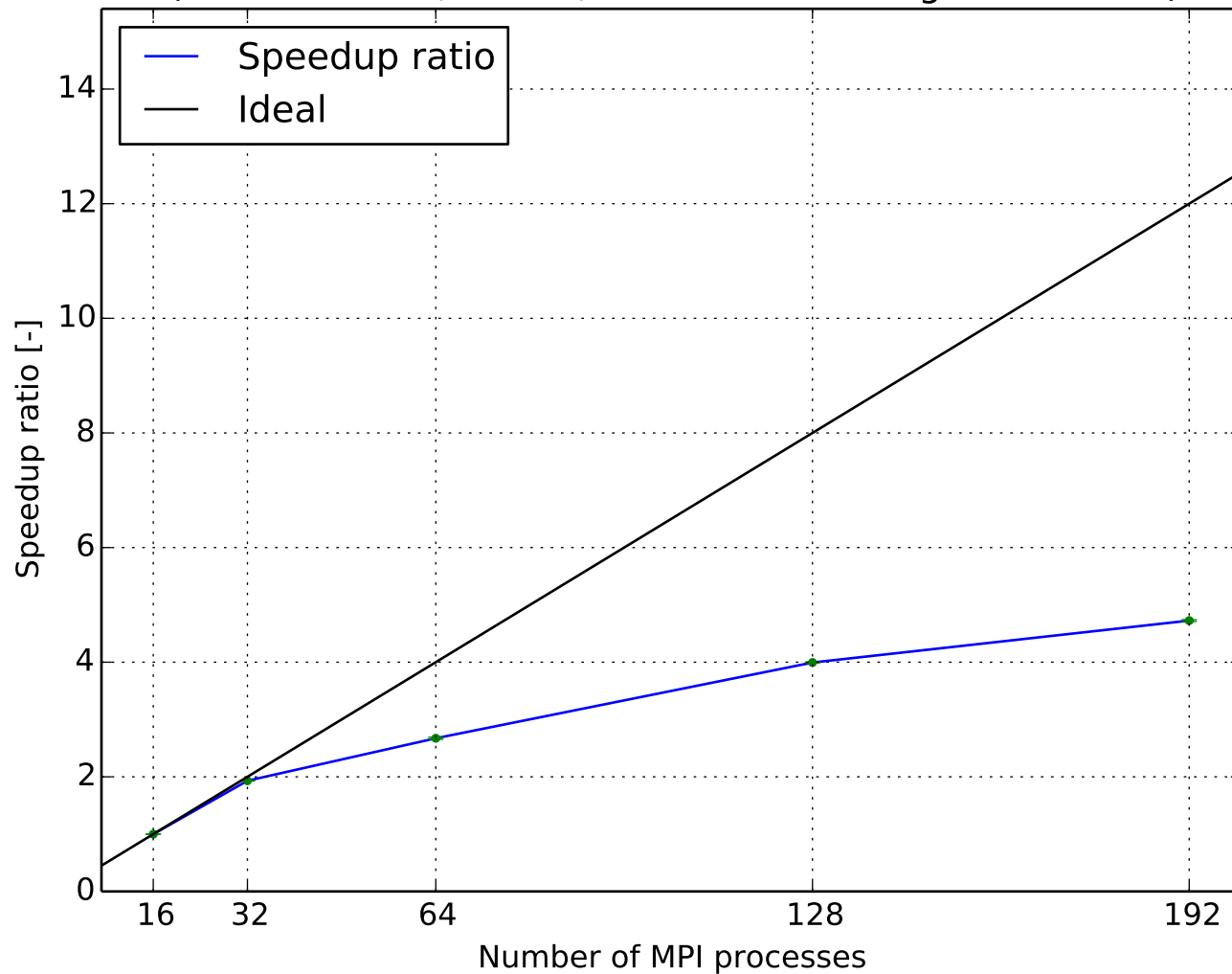
Parallel efficiency
(2.9952M cells, WALE ,GAMG-GaussSeidel)



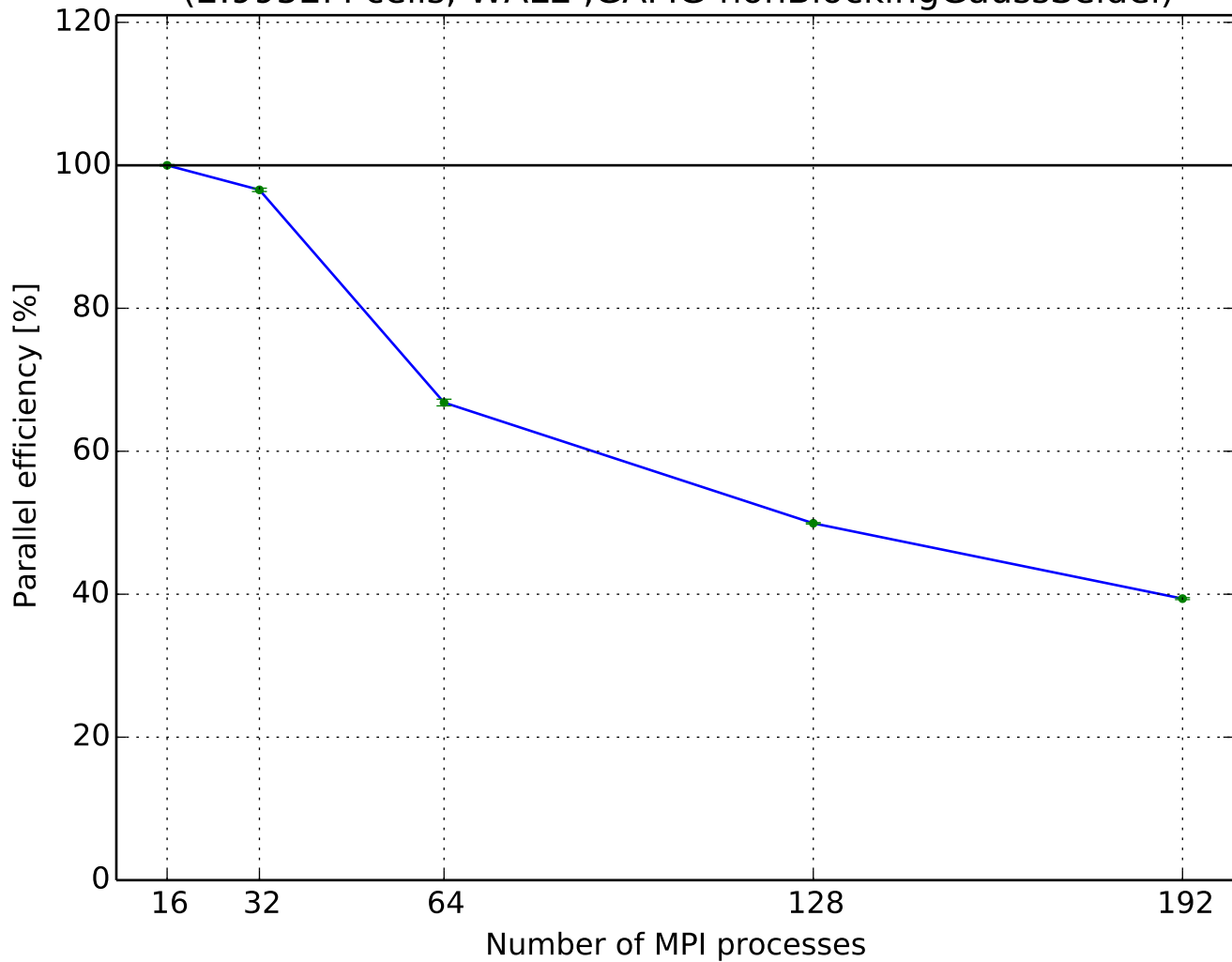
Execution time per time step
(2.9952M cells, WALE ,GAMG-nonBlockingGaussSeidel)



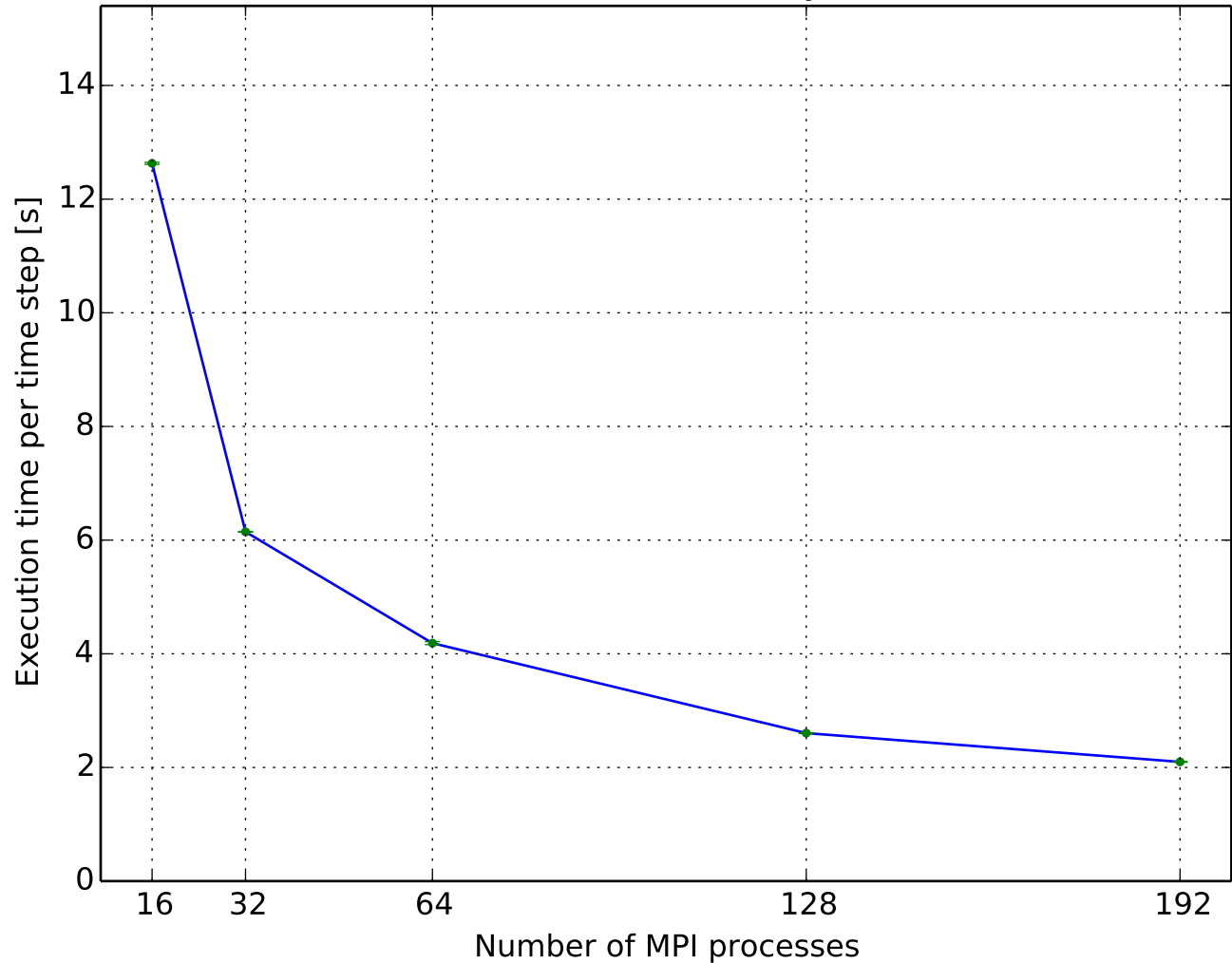
Speedup ratio
(2.9952M cells, WALE ,GAMG-nonBlockingGaussSeidel)



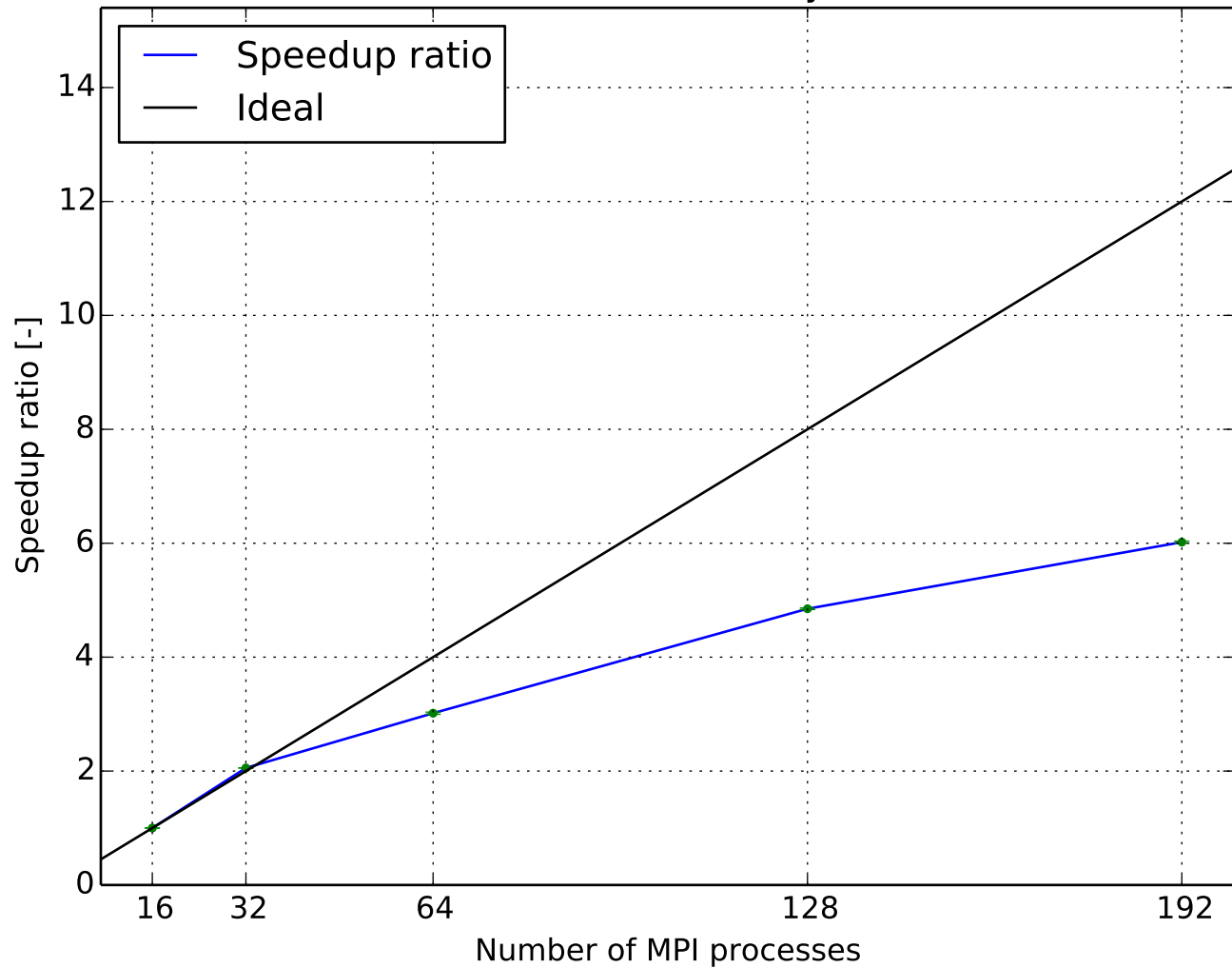
Parallel efficiency
(2.9952M cells, WALE ,GAMG-nonBlockingGaussSeidel)



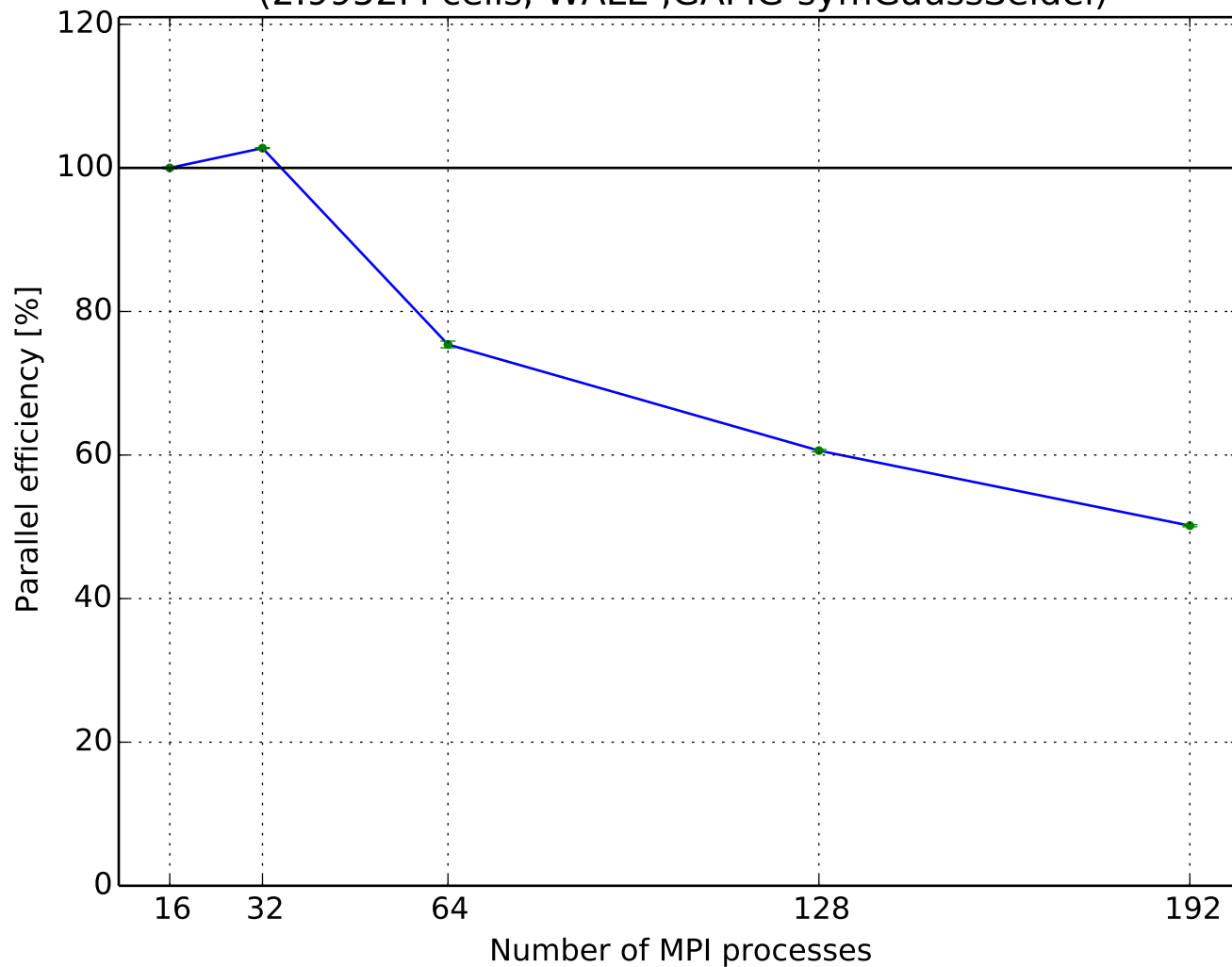
Execution time per time step
(2.9952M cells, WALE ,GAMG-symGaussSeidel)



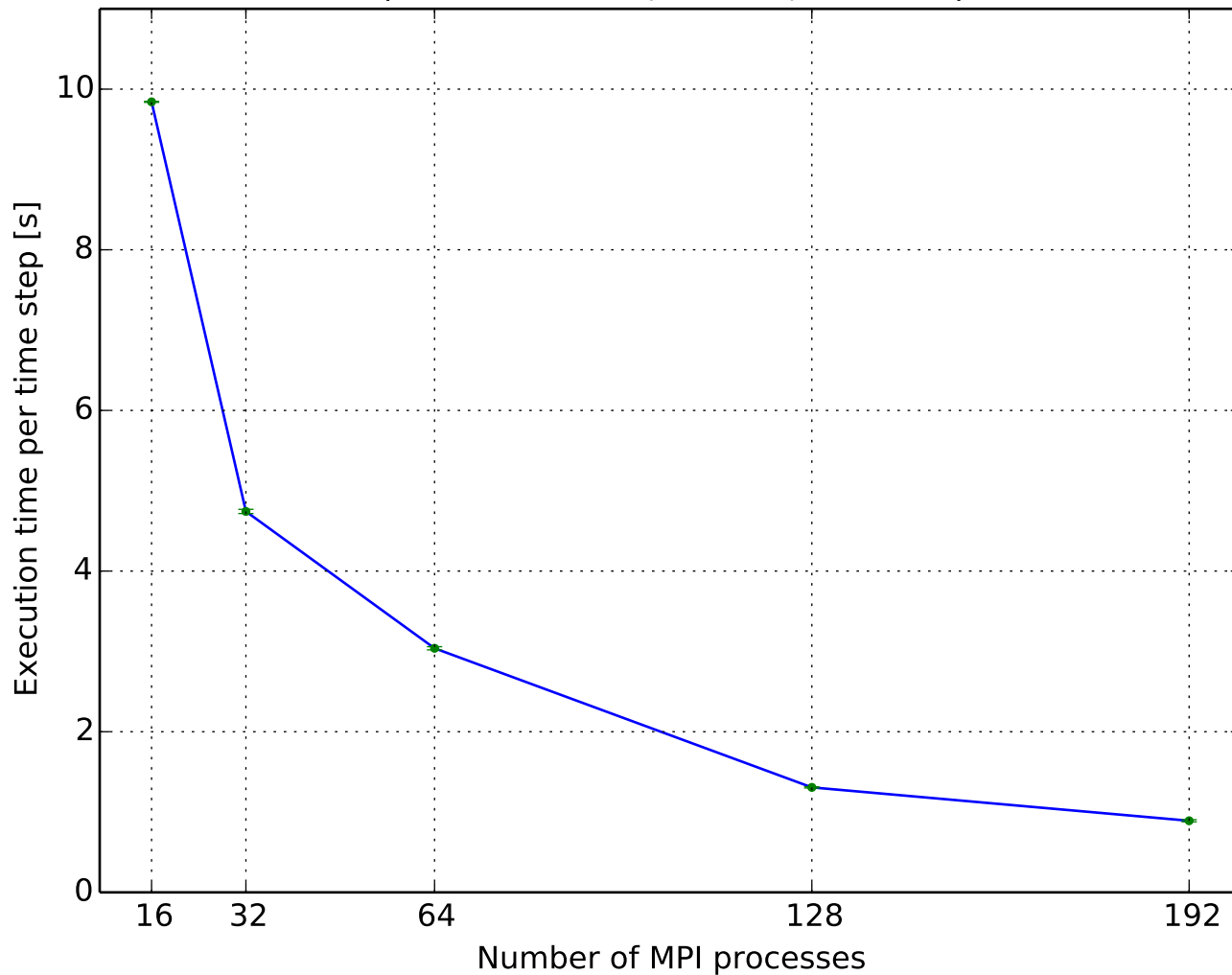
Speedup ratio
(2.9952M cells, WALE ,GAMG-symGaussSeidel)



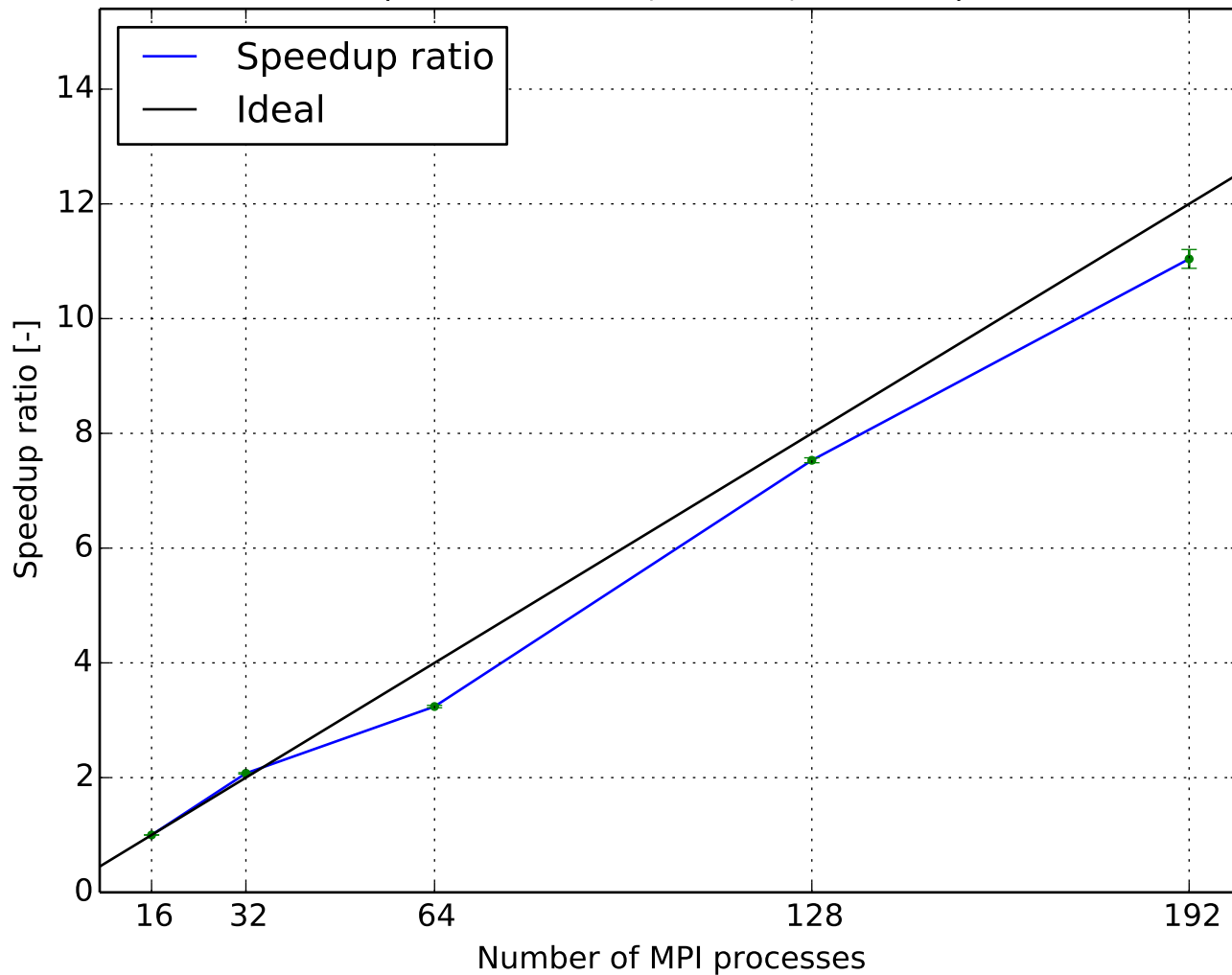
Parallel efficiency
(2.9952M cells, WALE ,GAMG-symGaussSeidel)



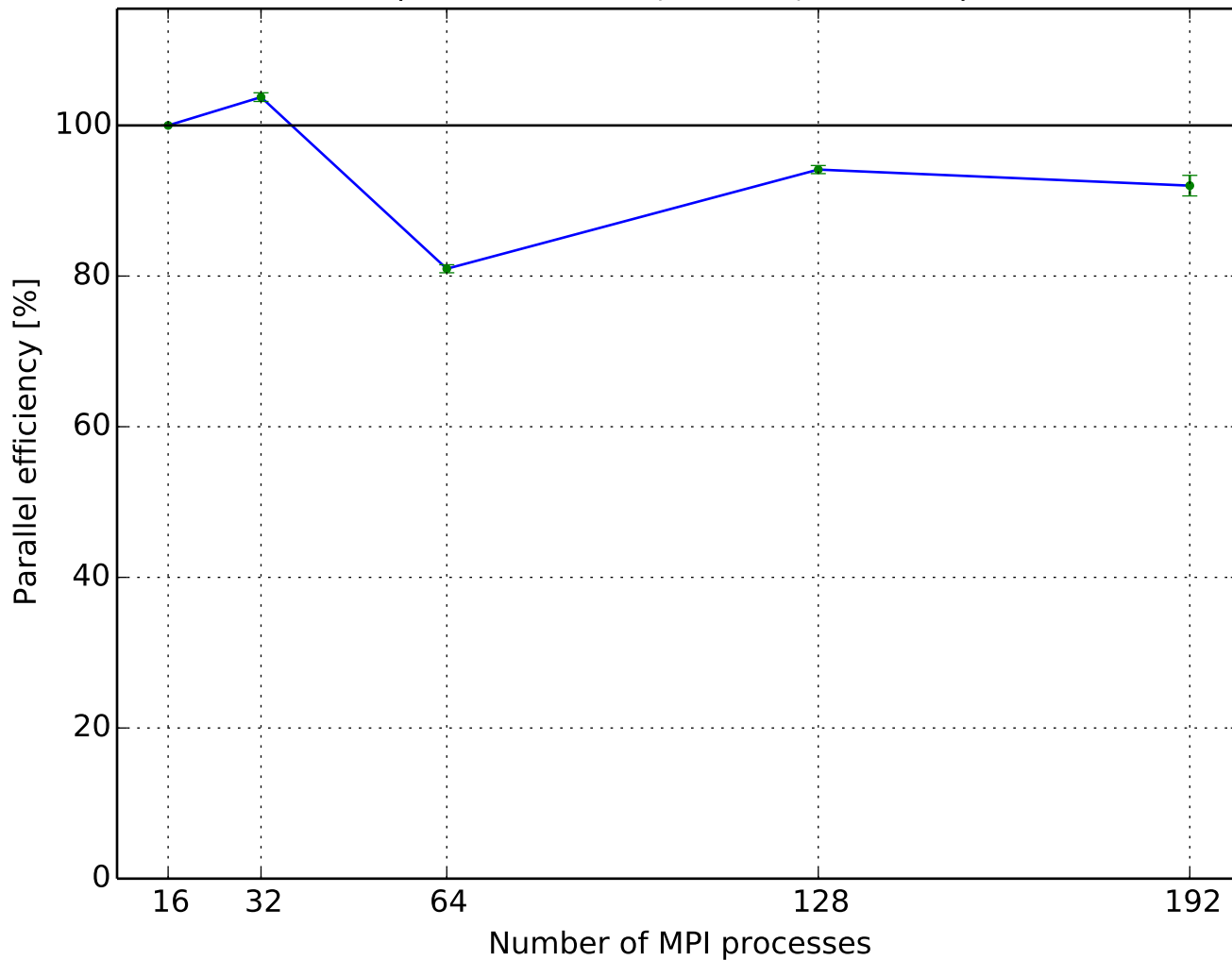
Execution time per time step
(2.9952M cells, WALE ,PCG-DIC)



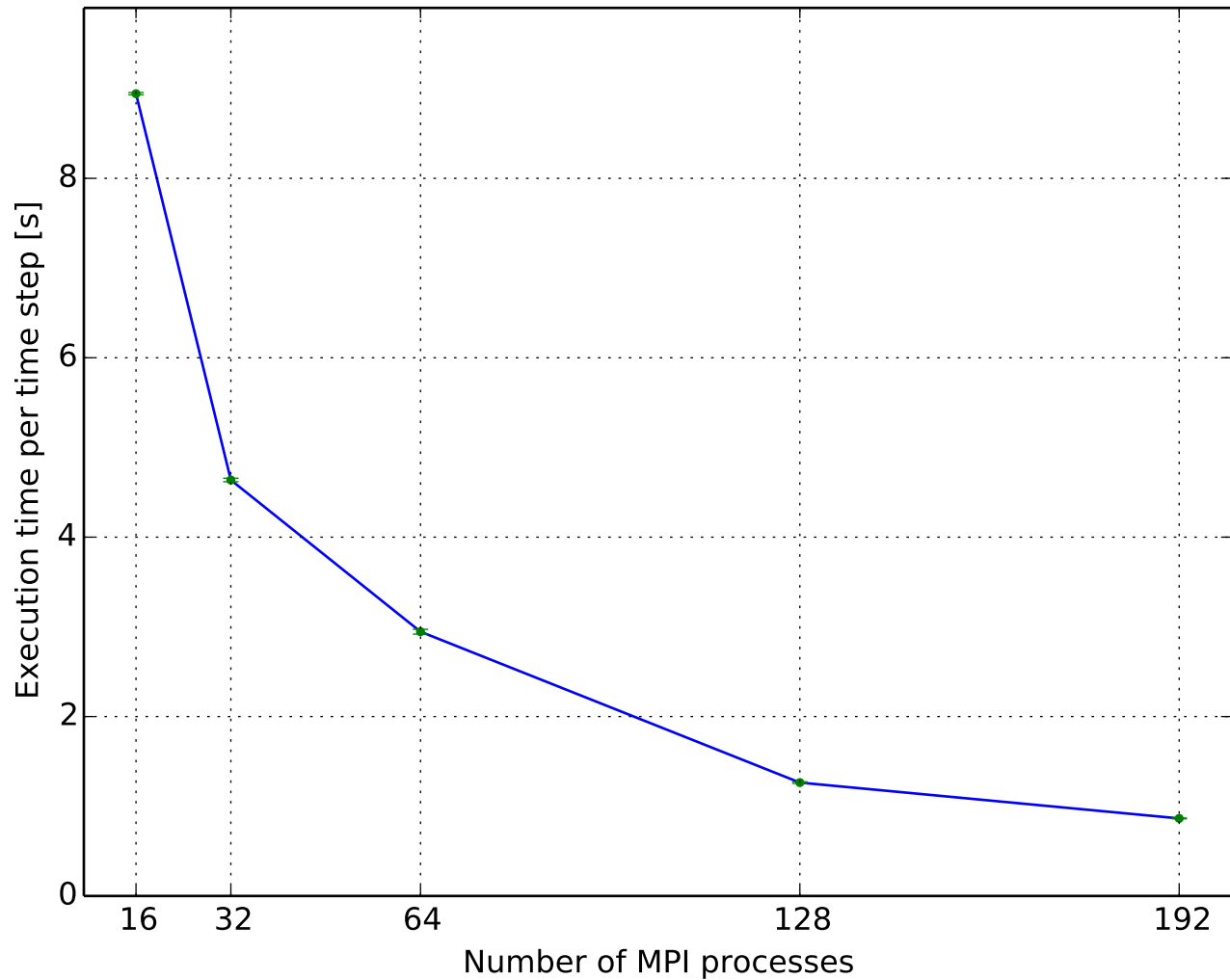
Speedup ratio
(2.9952M cells, WALE ,PCG-DIC)



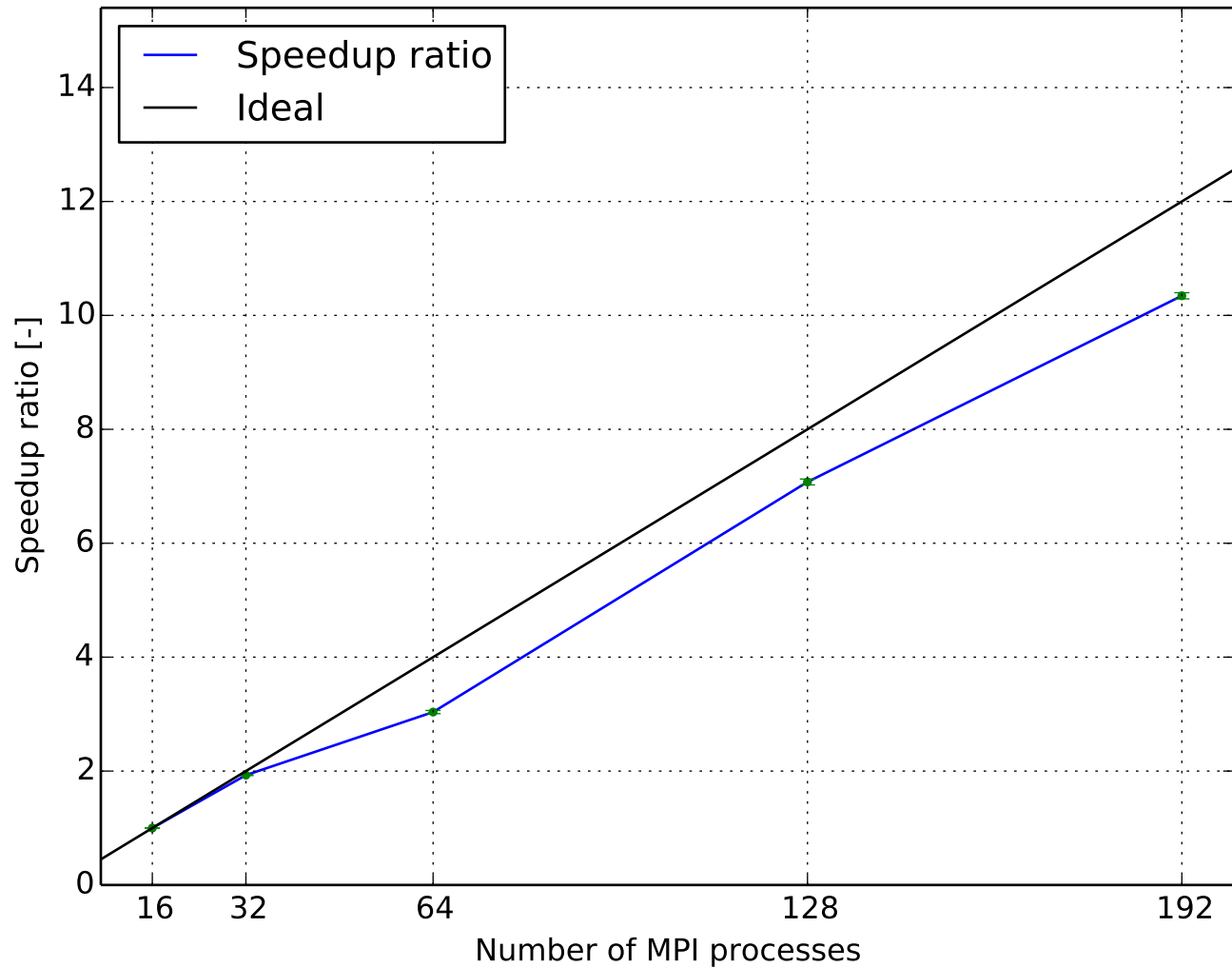
Parallel efficiency
(2.9952M cells, WALE ,PCG-DIC)



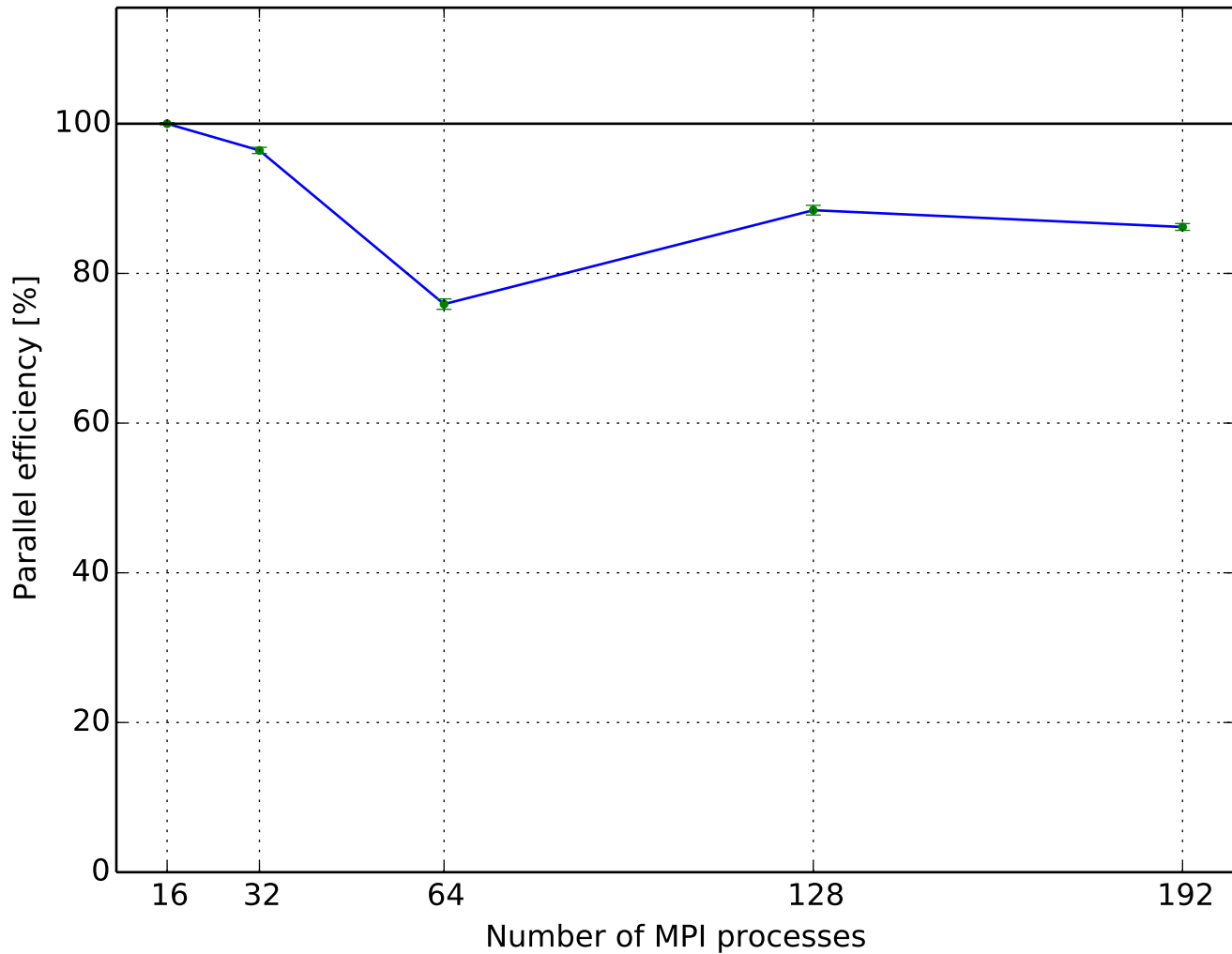
Execution time per time step
(2.9952M cells, WALE ,PCG-FDIC)



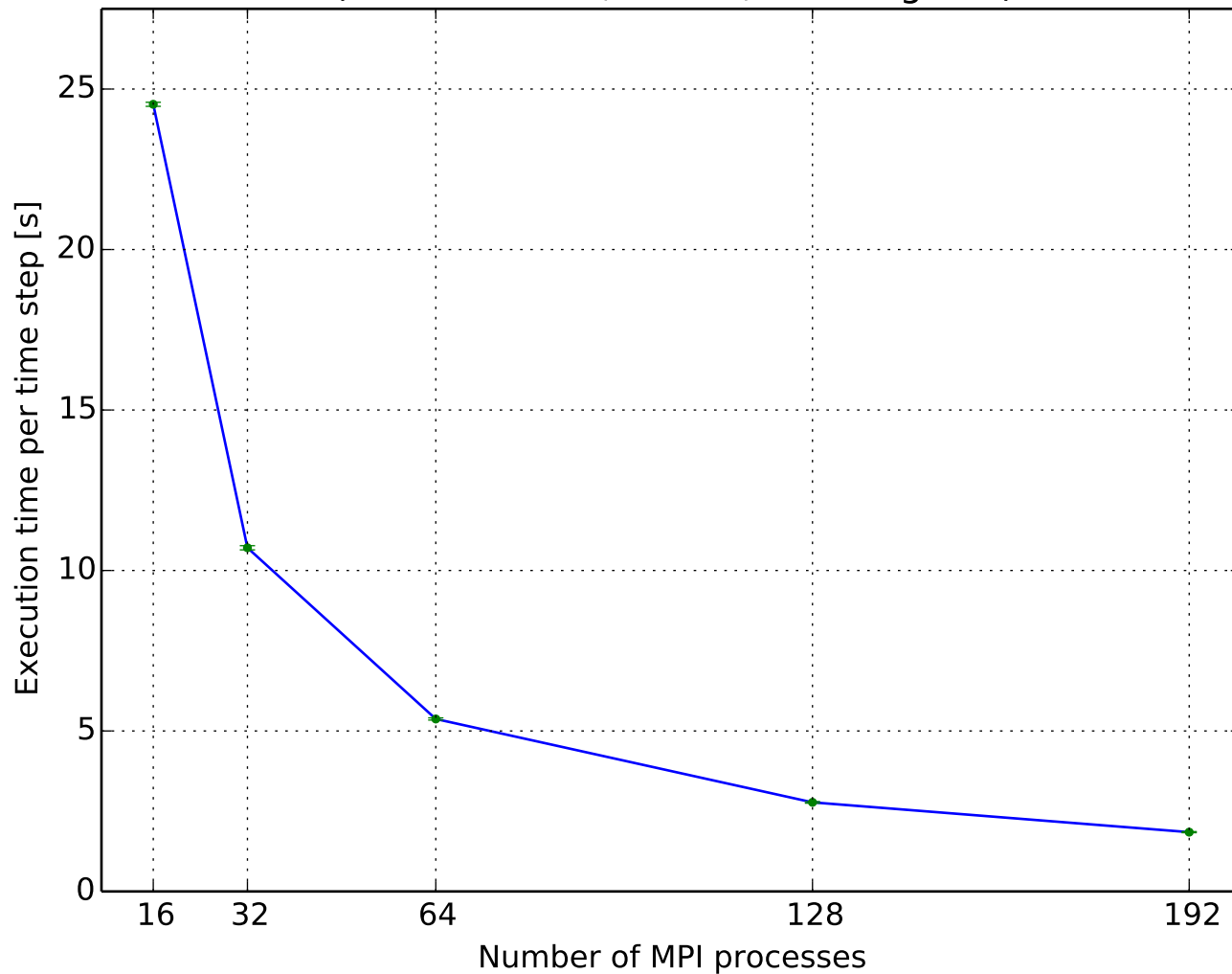
Speedup ratio
(2.9952M cells, WALE ,PCG-FDIC)



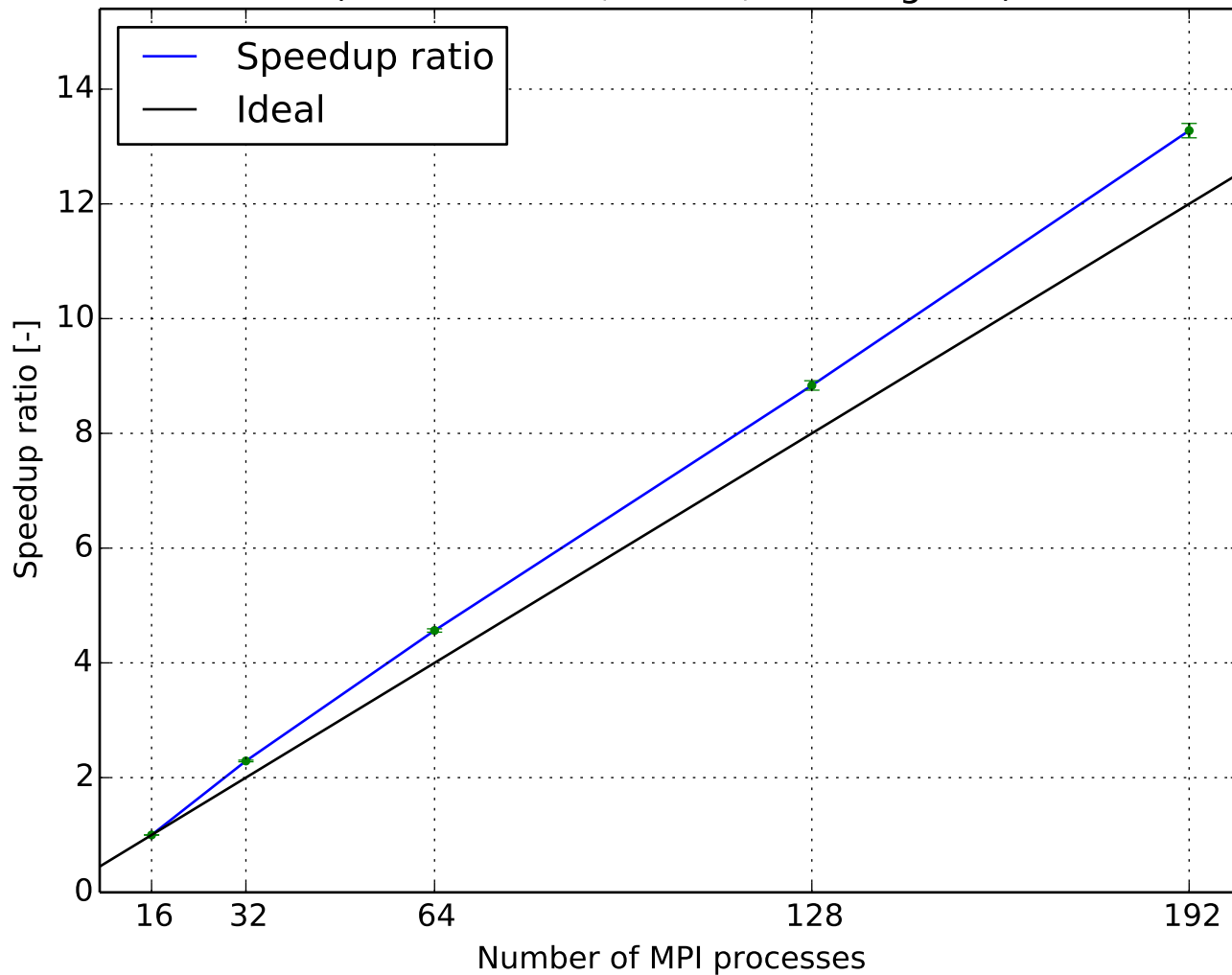
Parallel efficiency
(2.9952M cells, WALE ,PCG-FDIC)



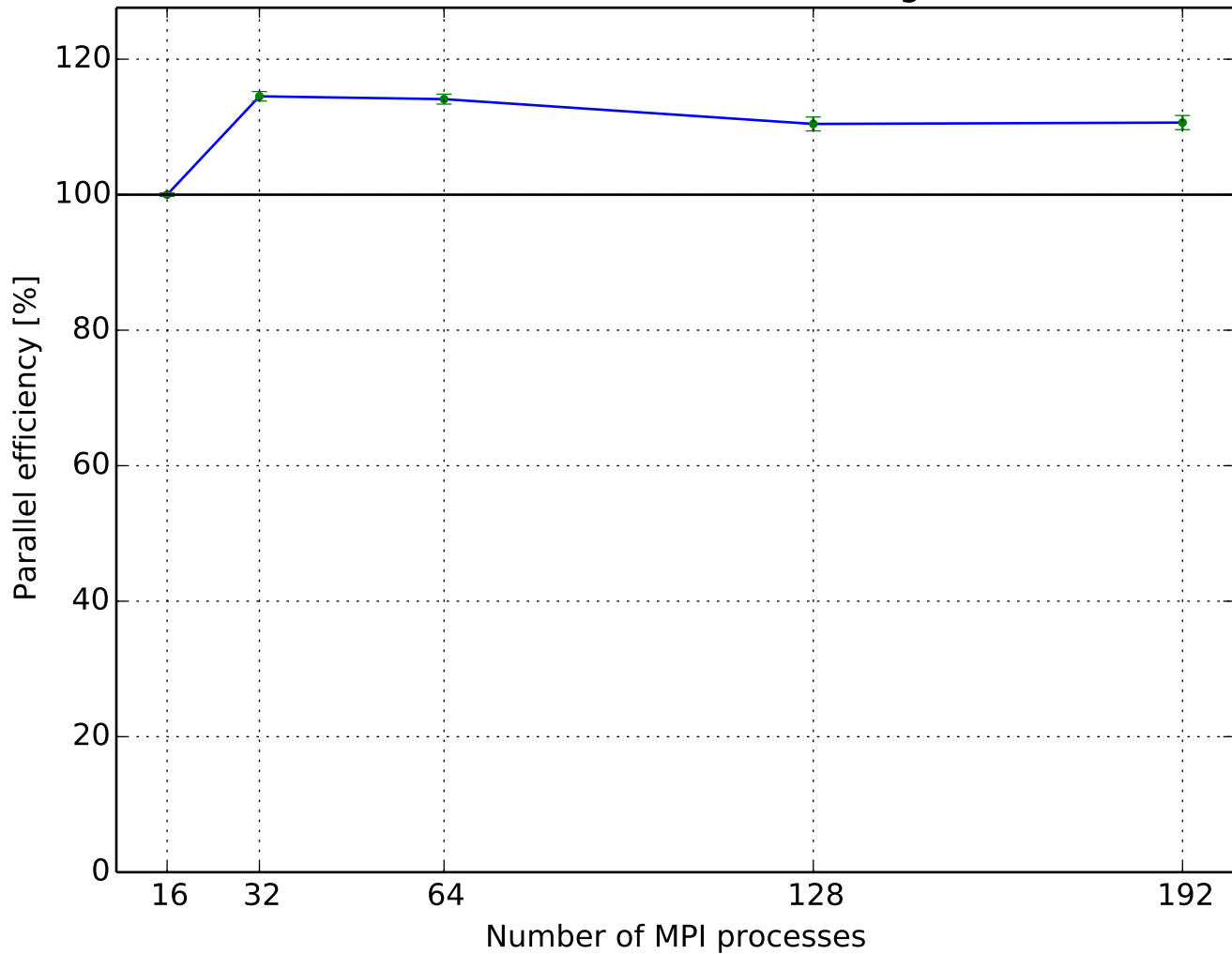
Execution time per time step
(2.9952M cells, WALE ,PCG-diagonal)



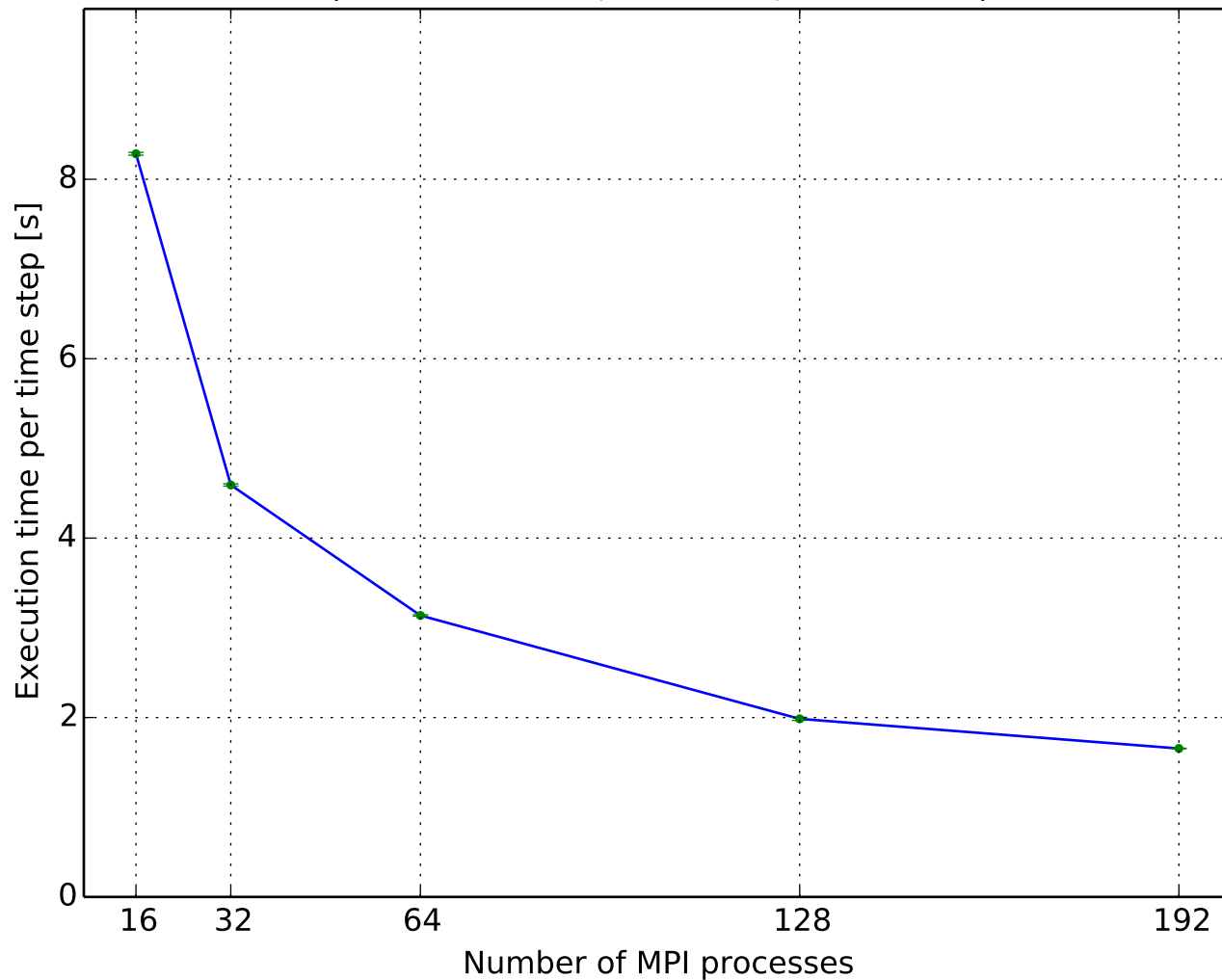
Speedup ratio
(2.9952M cells, WALE ,PCG-diagonal)



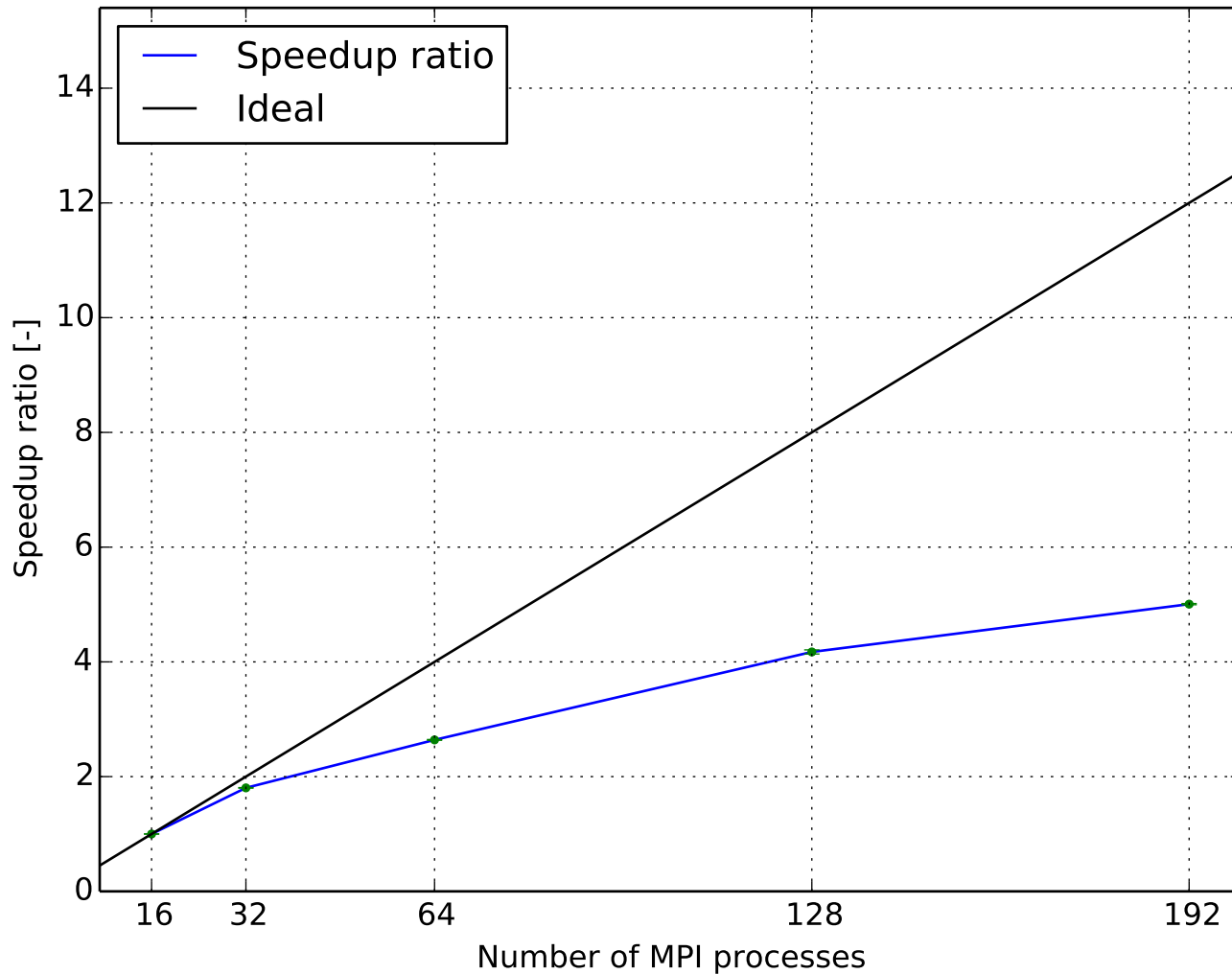
Parallel efficiency
(2.9952M cells, WALE ,PCG-diagonal)



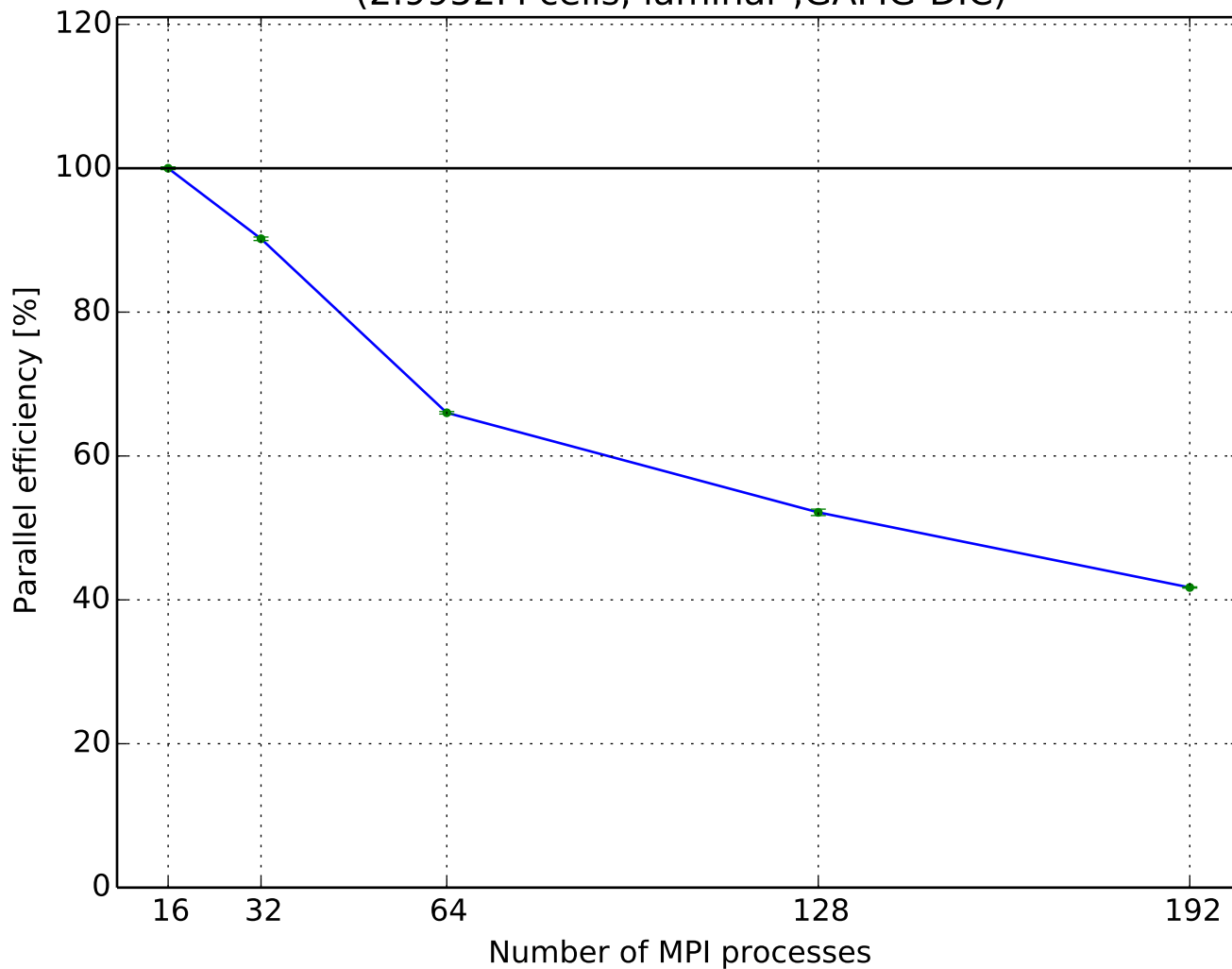
Execution time per time step
(2.9952M cells, laminar ,GAMG-DIC)



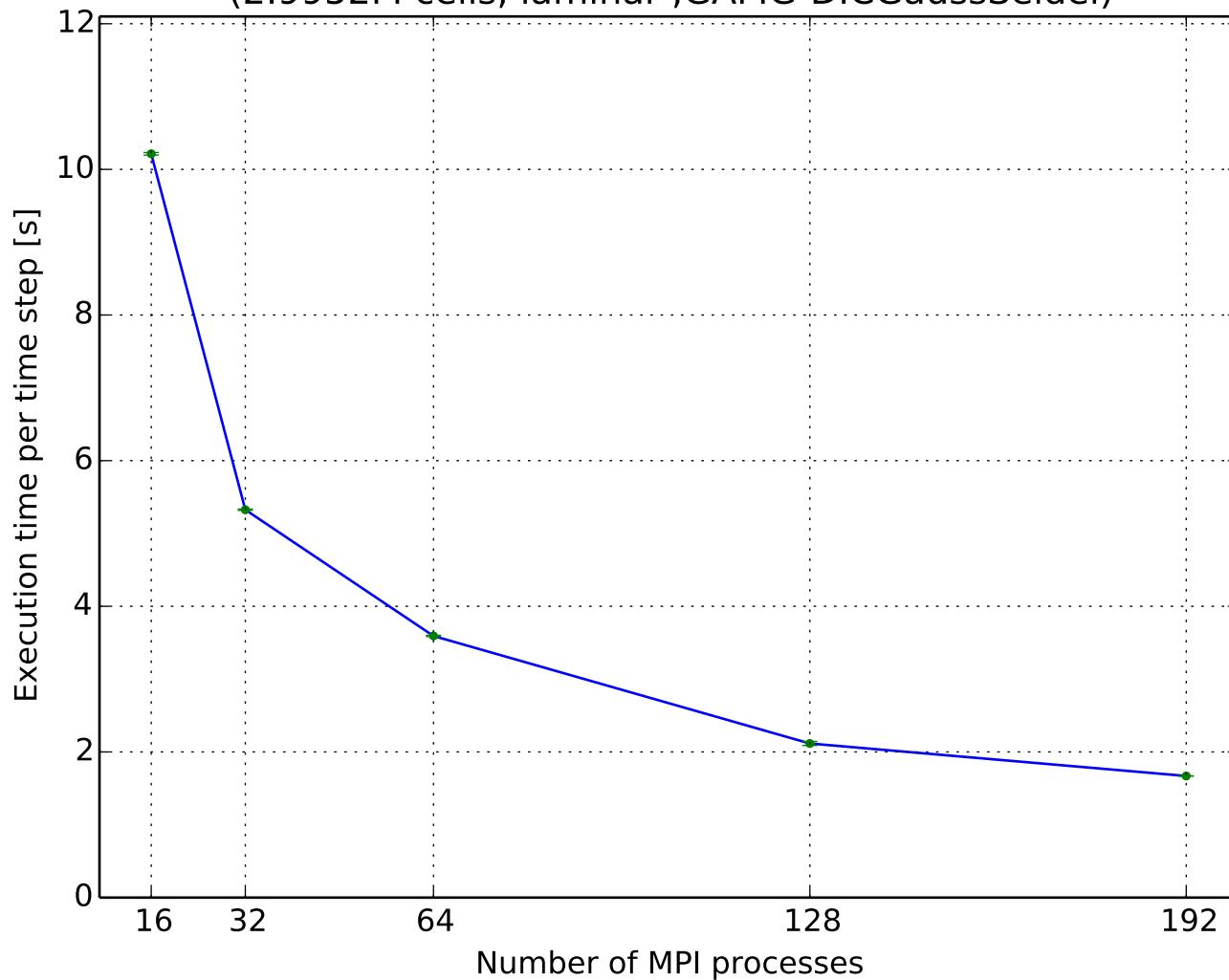
Speedup ratio
(2.9952M cells, laminar ,GAMG-DIC)



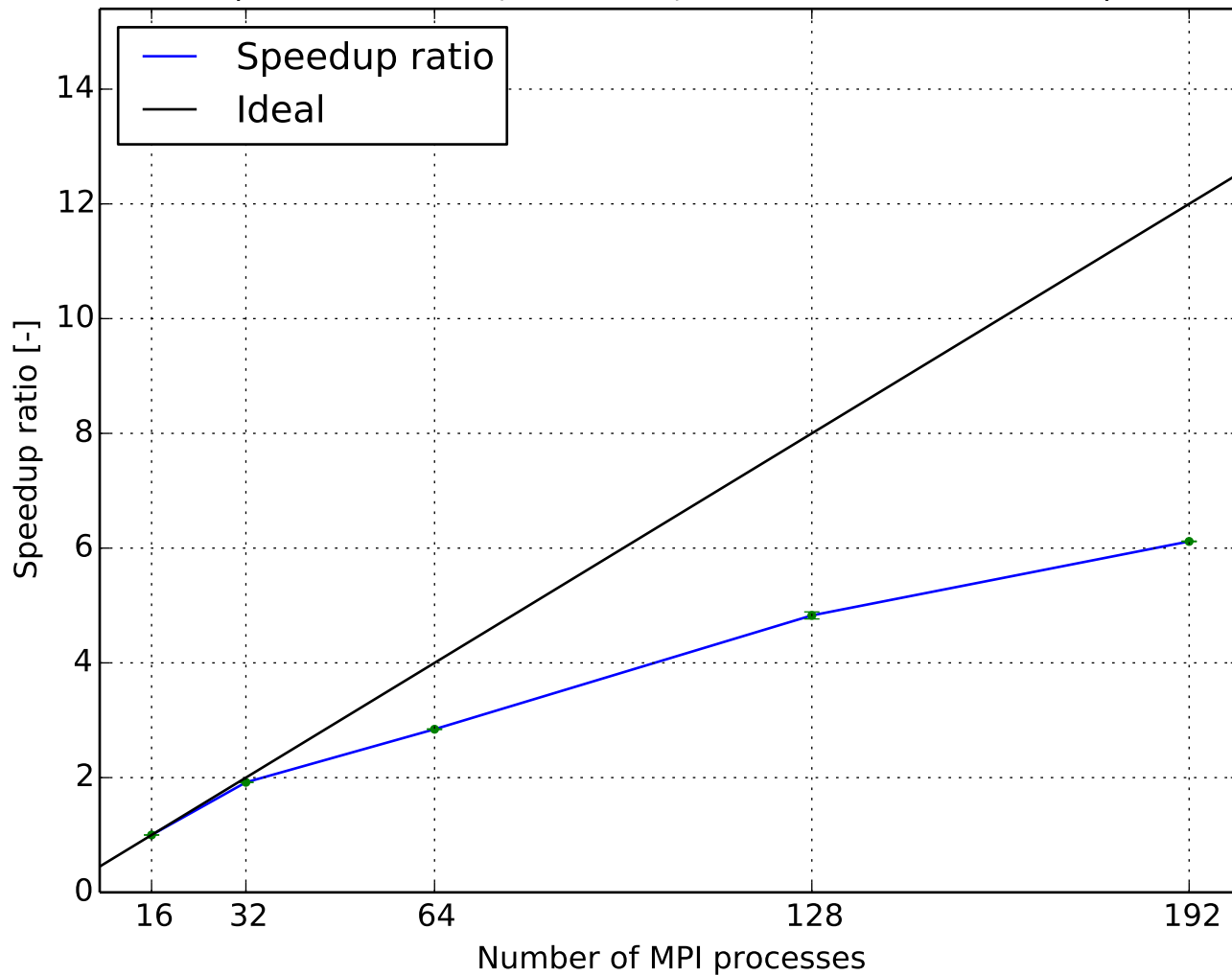
Parallel efficiency
(2.9952M cells, laminar ,GAMG-DIC)



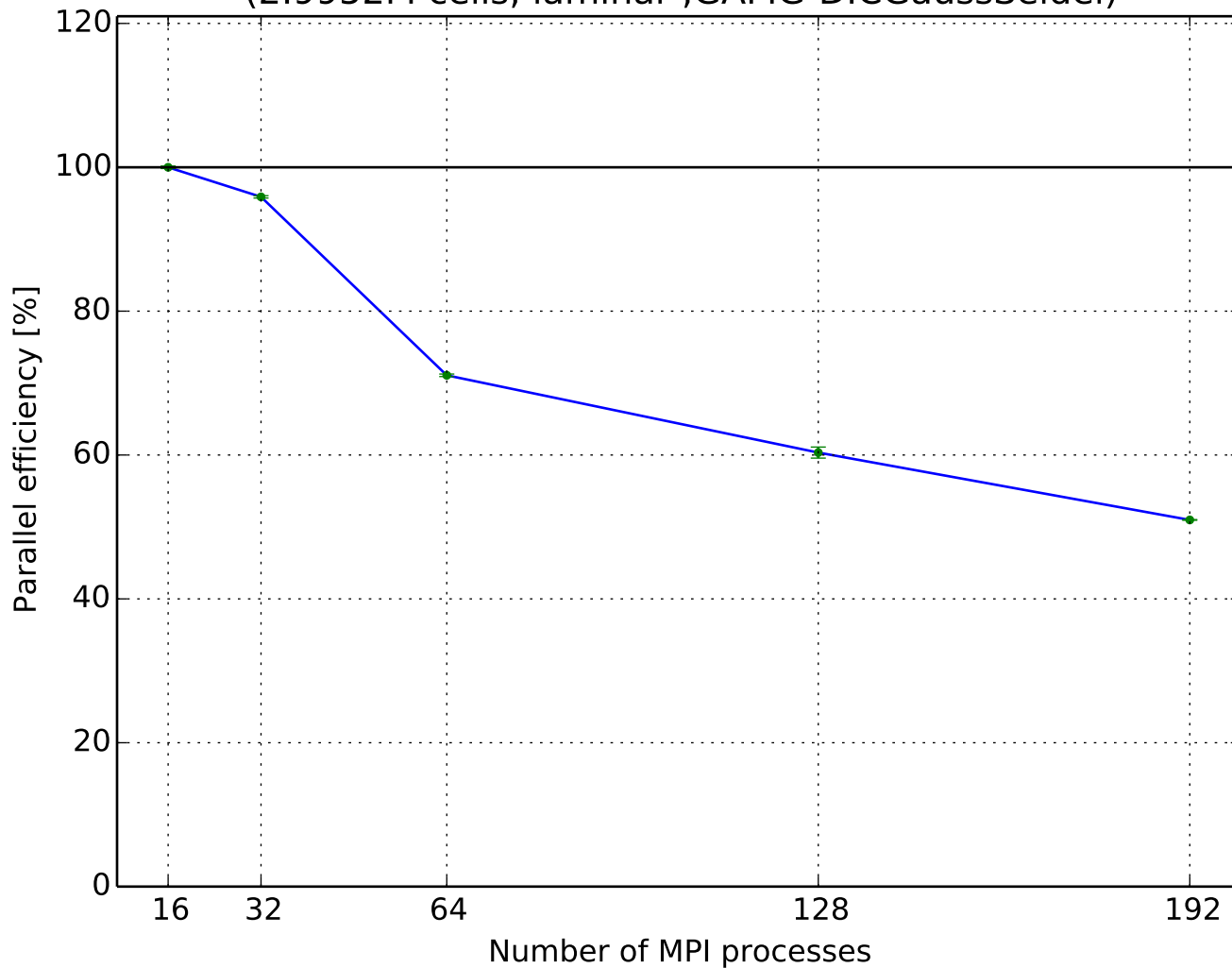
Execution time per time step
(2.9952M cells, laminar ,GAMG-DICGaussSeidel)



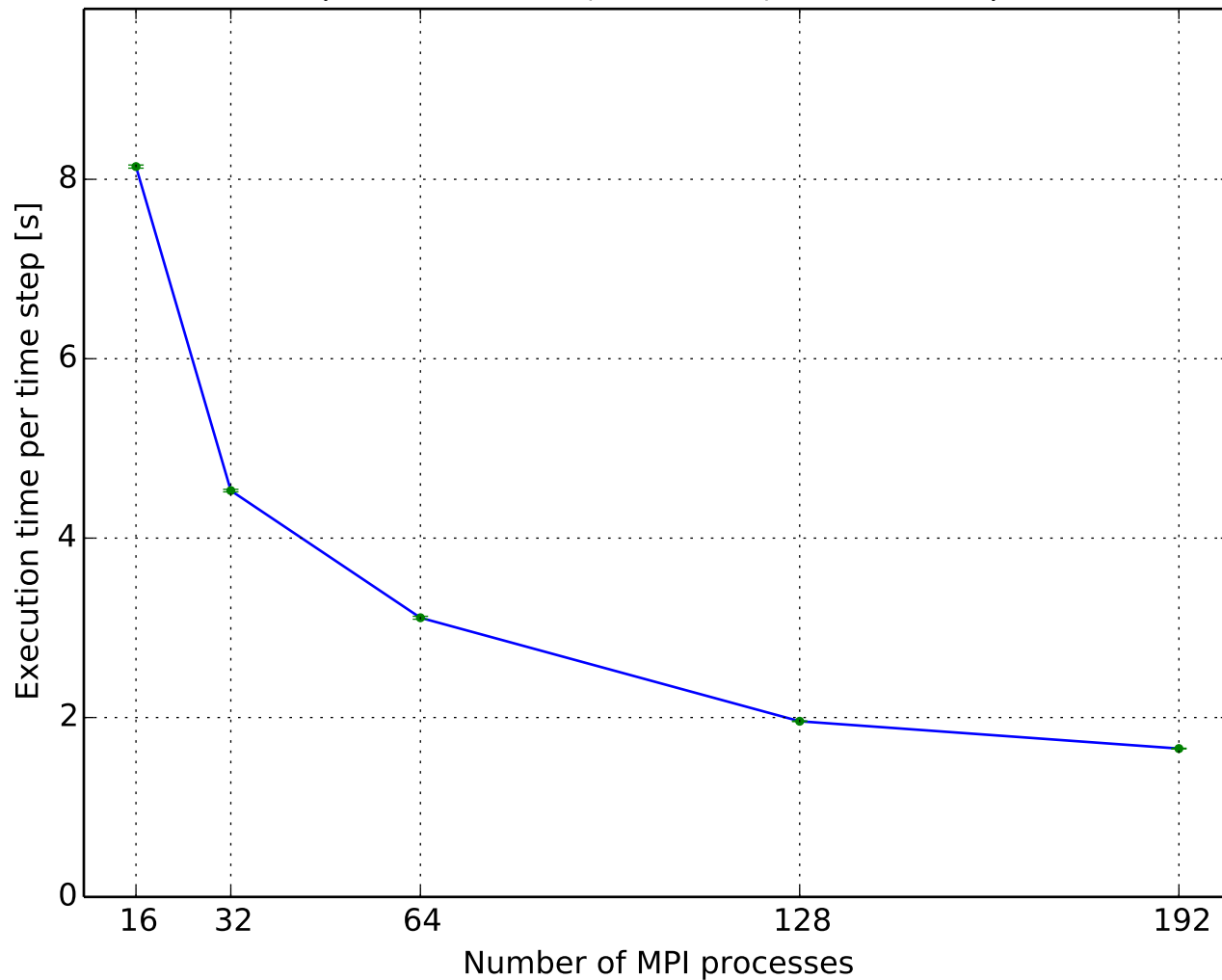
Speedup ratio
(2.9952M cells, laminar ,GAMG-DICGaussSeidel)



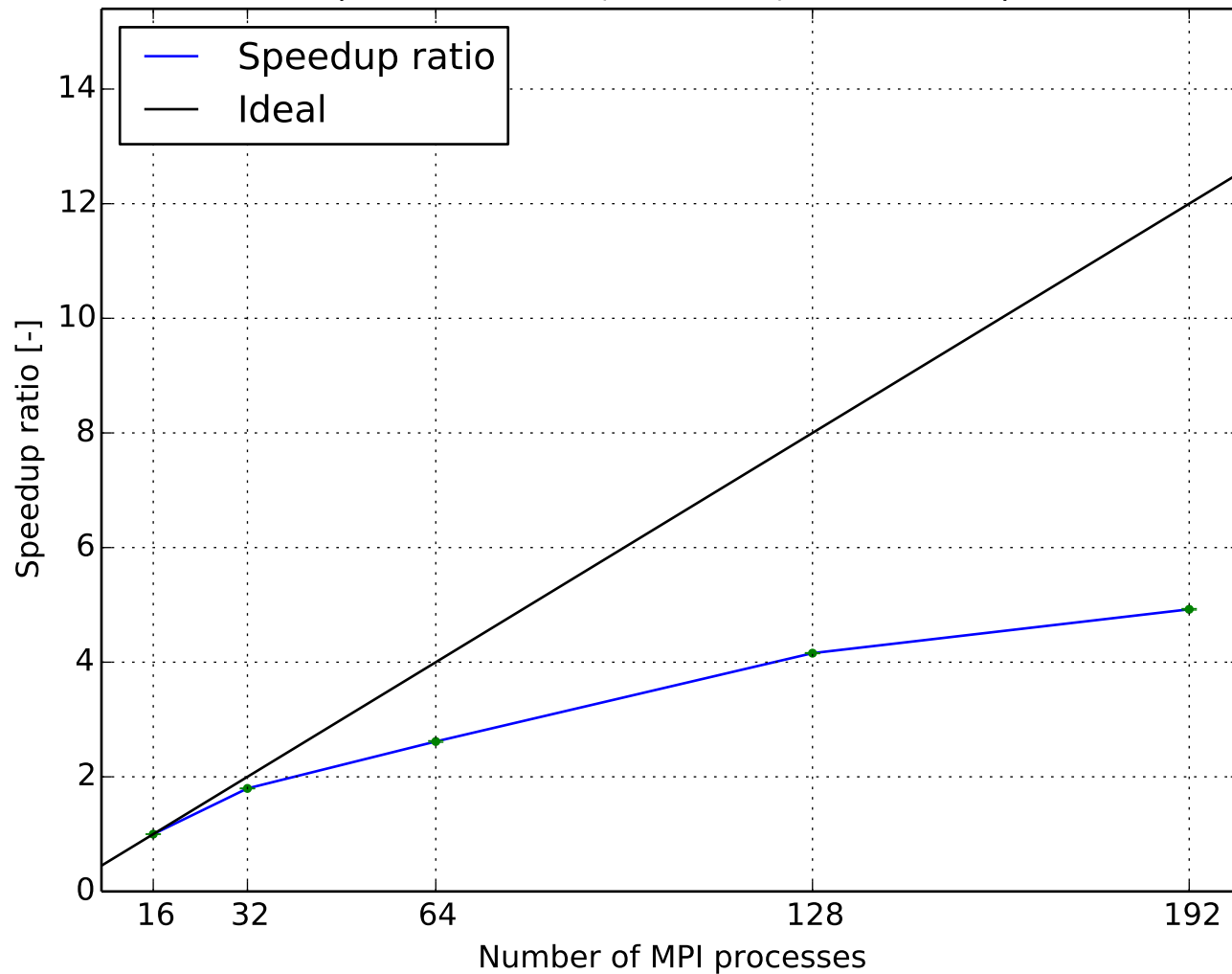
Parallel efficiency
(2.9952M cells, laminar ,GAMG-DICGaussSeidel)



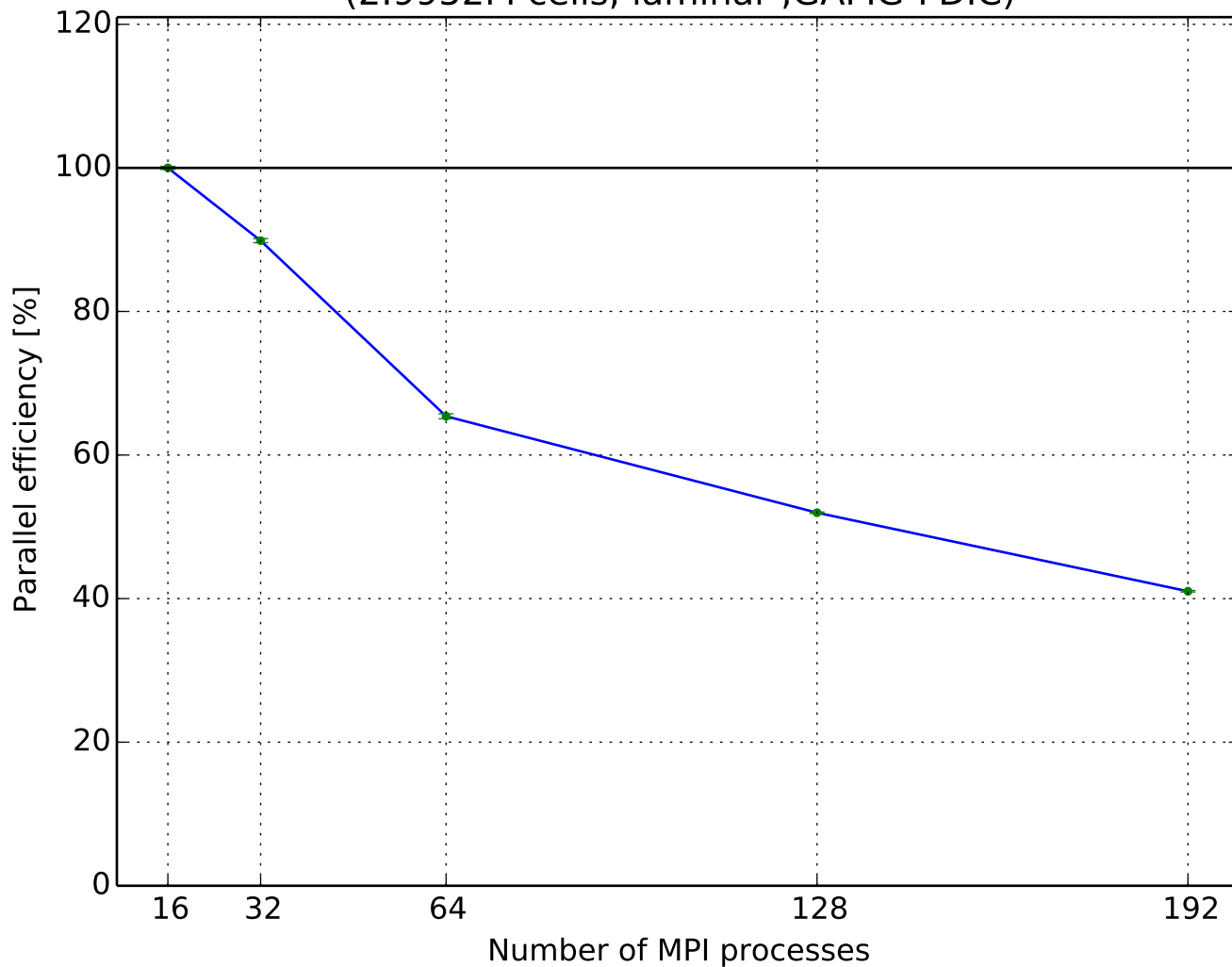
Execution time per time step
(2.9952M cells, laminar ,GAMG-FDIC)



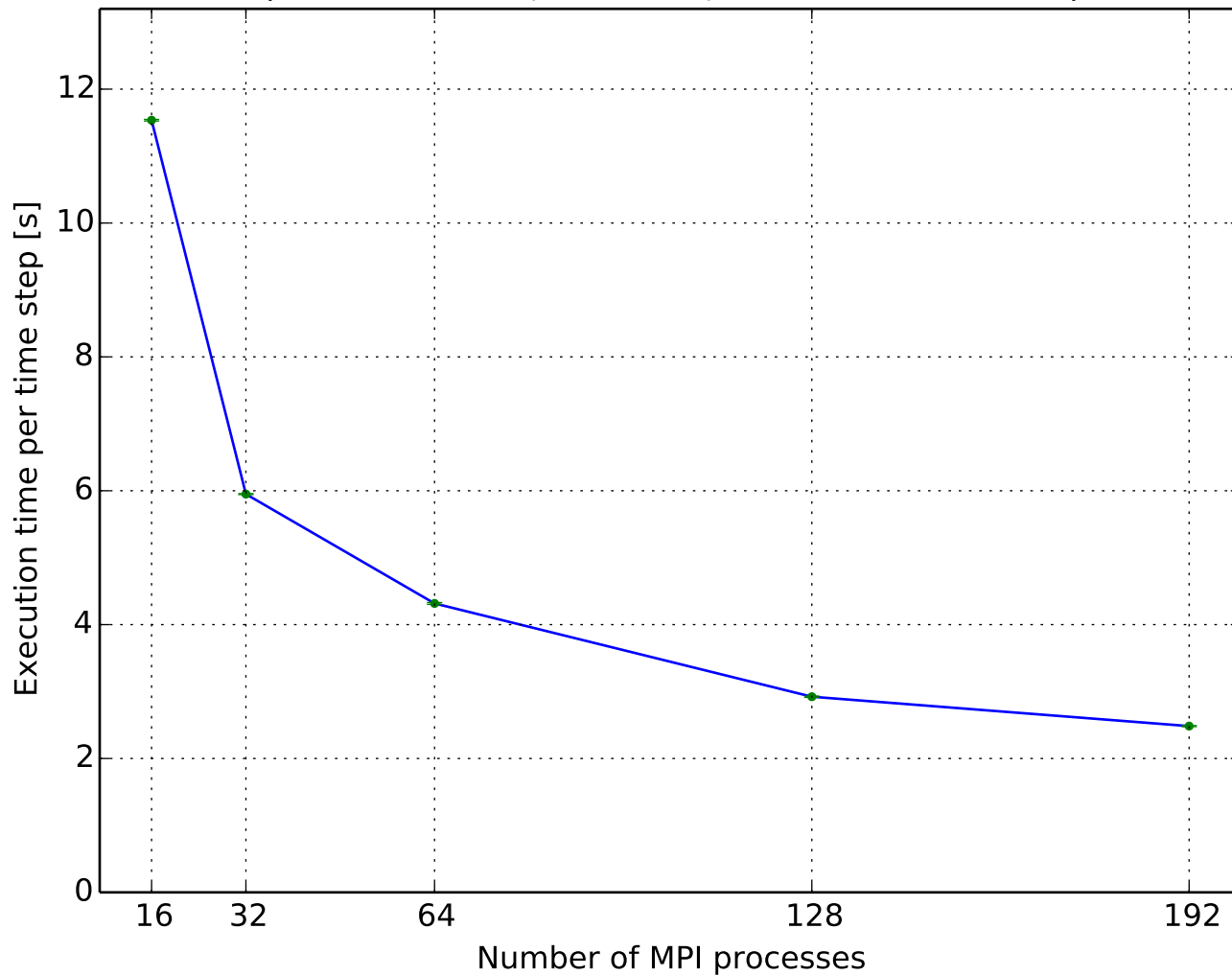
Speedup ratio
(2.9952M cells, laminar ,GAMG-FDIC)



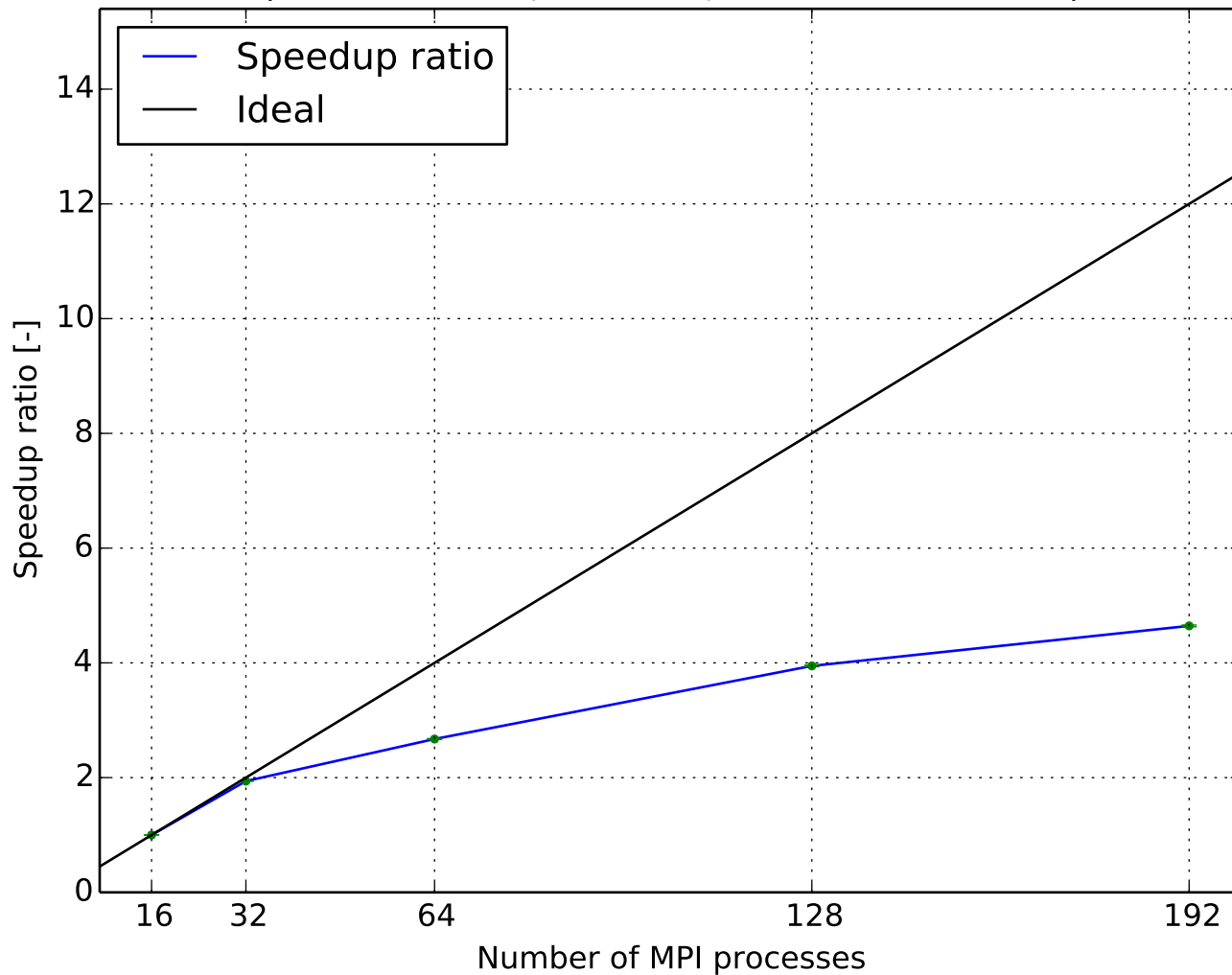
Parallel efficiency
(2.9952M cells, laminar ,GAMG-FDIC)



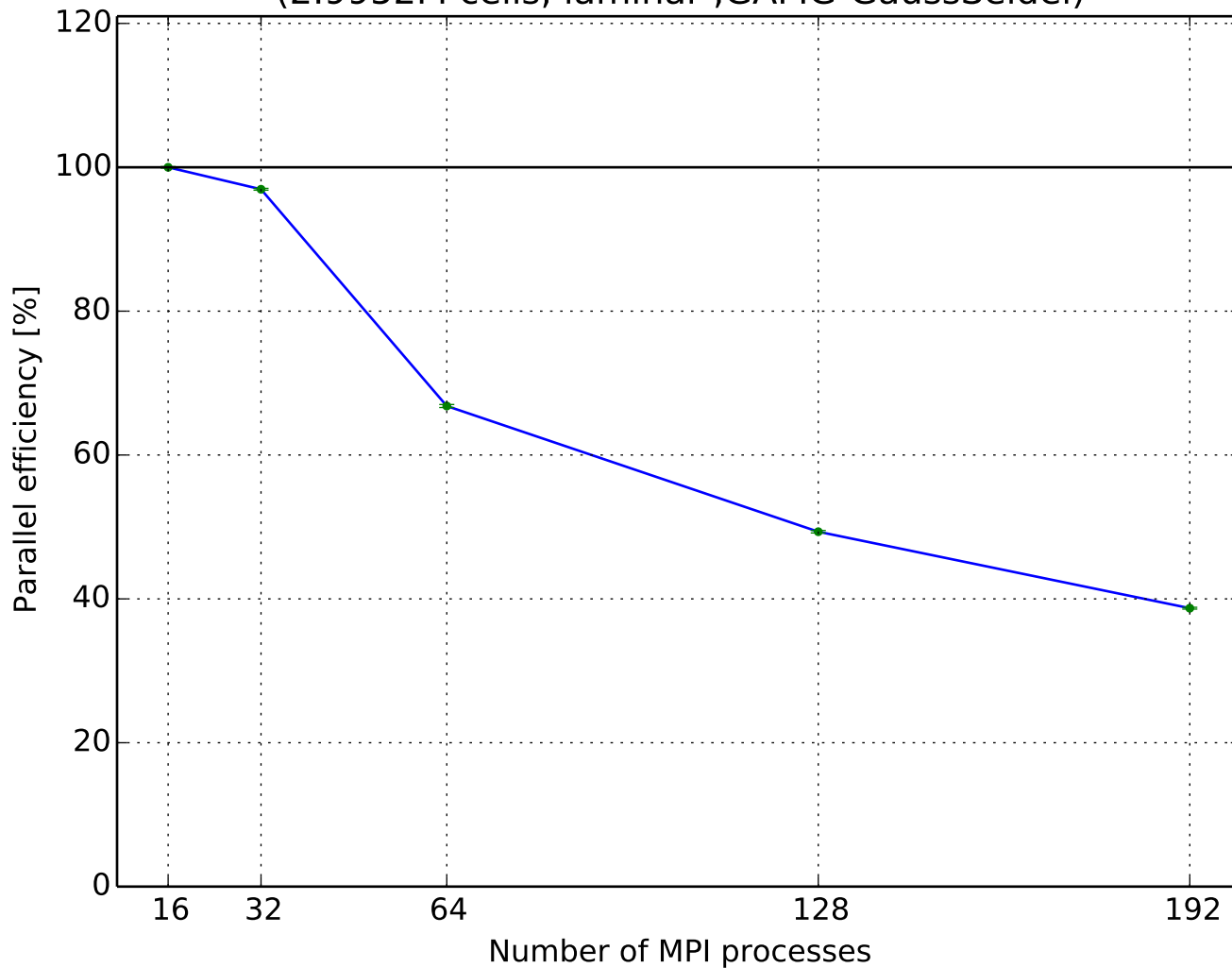
Execution time per time step
(2.9952M cells, laminar ,GAMG-GaussSeidel)



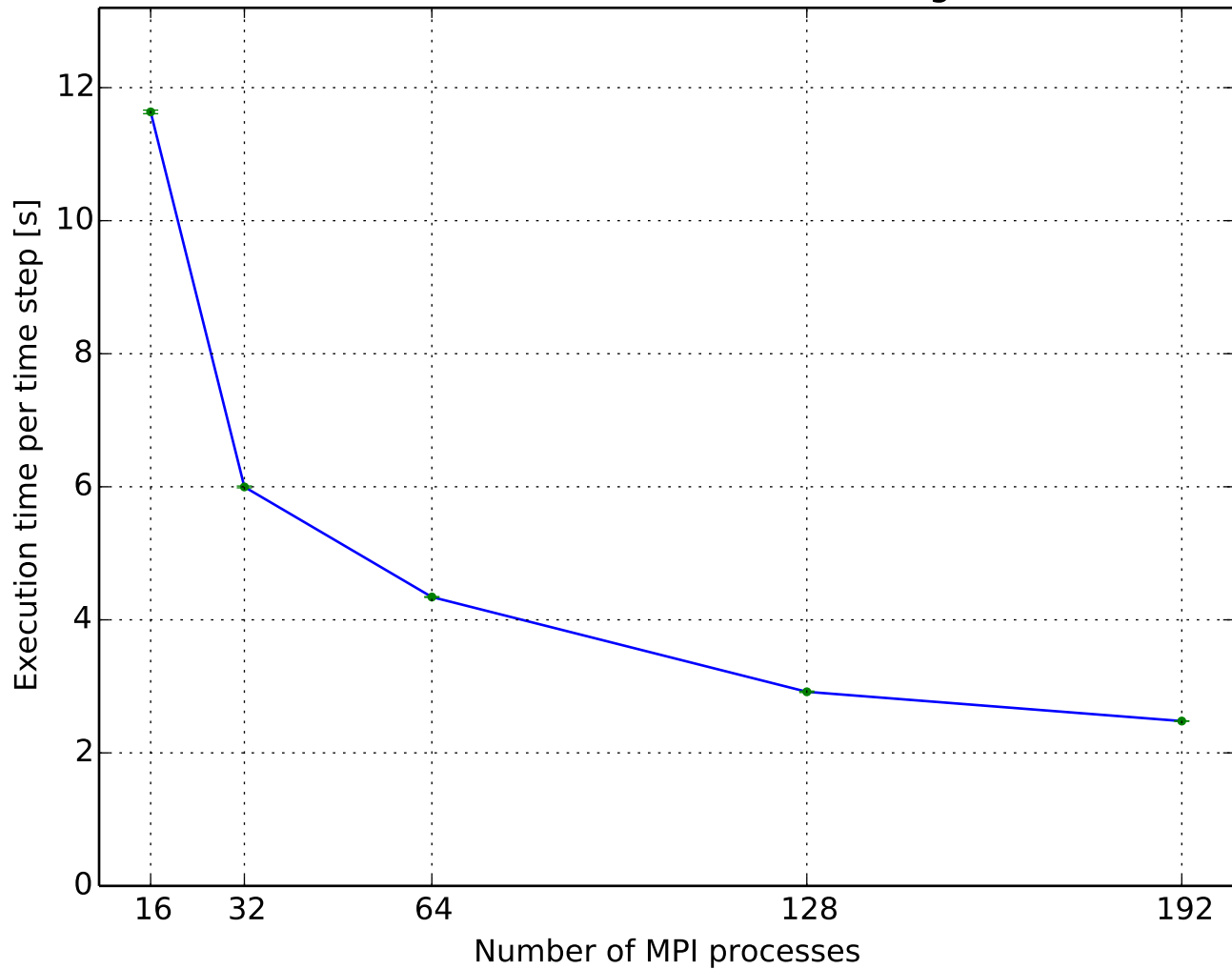
Speedup ratio
(2.9952M cells, laminar ,GAMG-GaussSeidel)



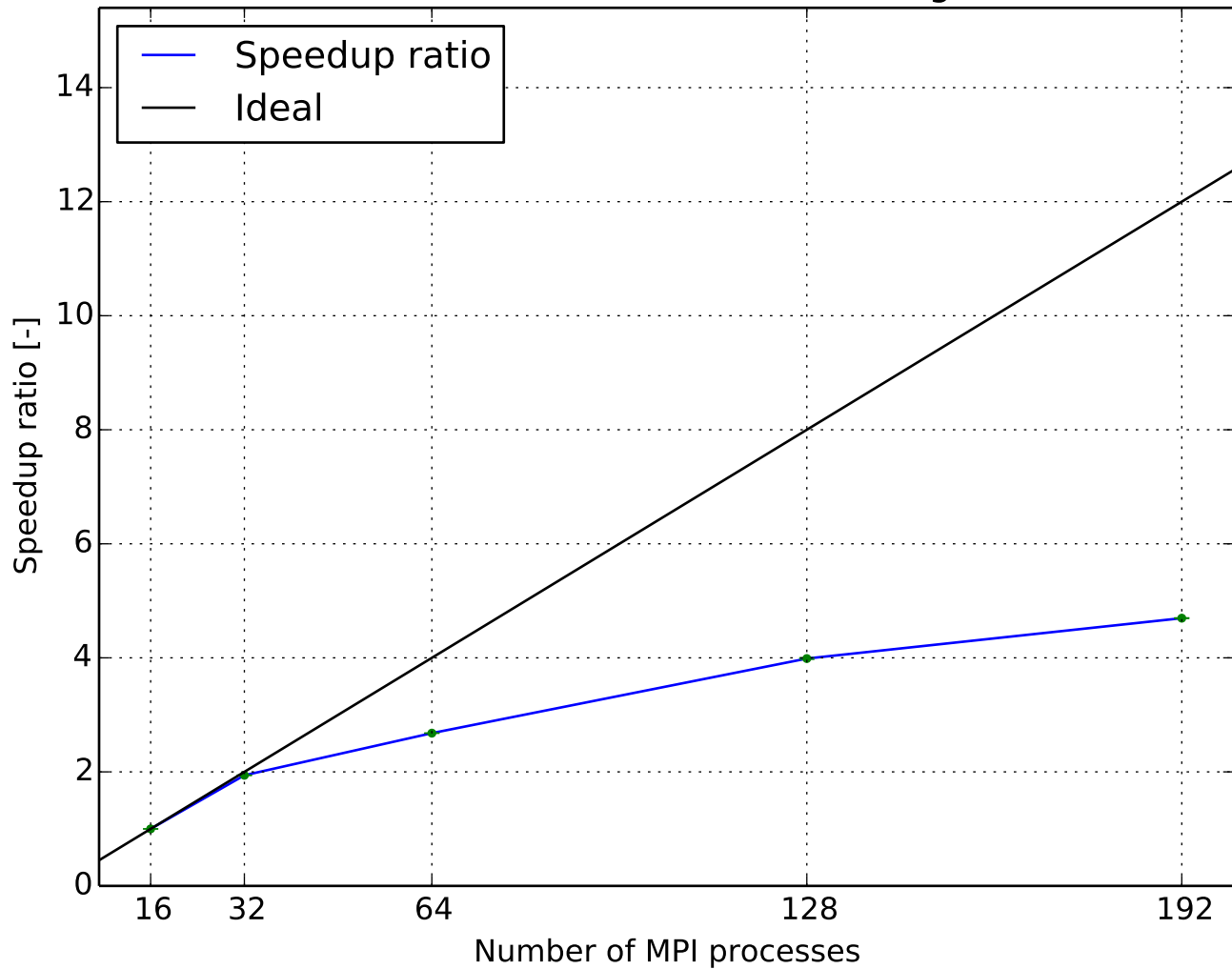
Parallel efficiency
(2.9952M cells, laminar ,GAMG-GaussSeidel)



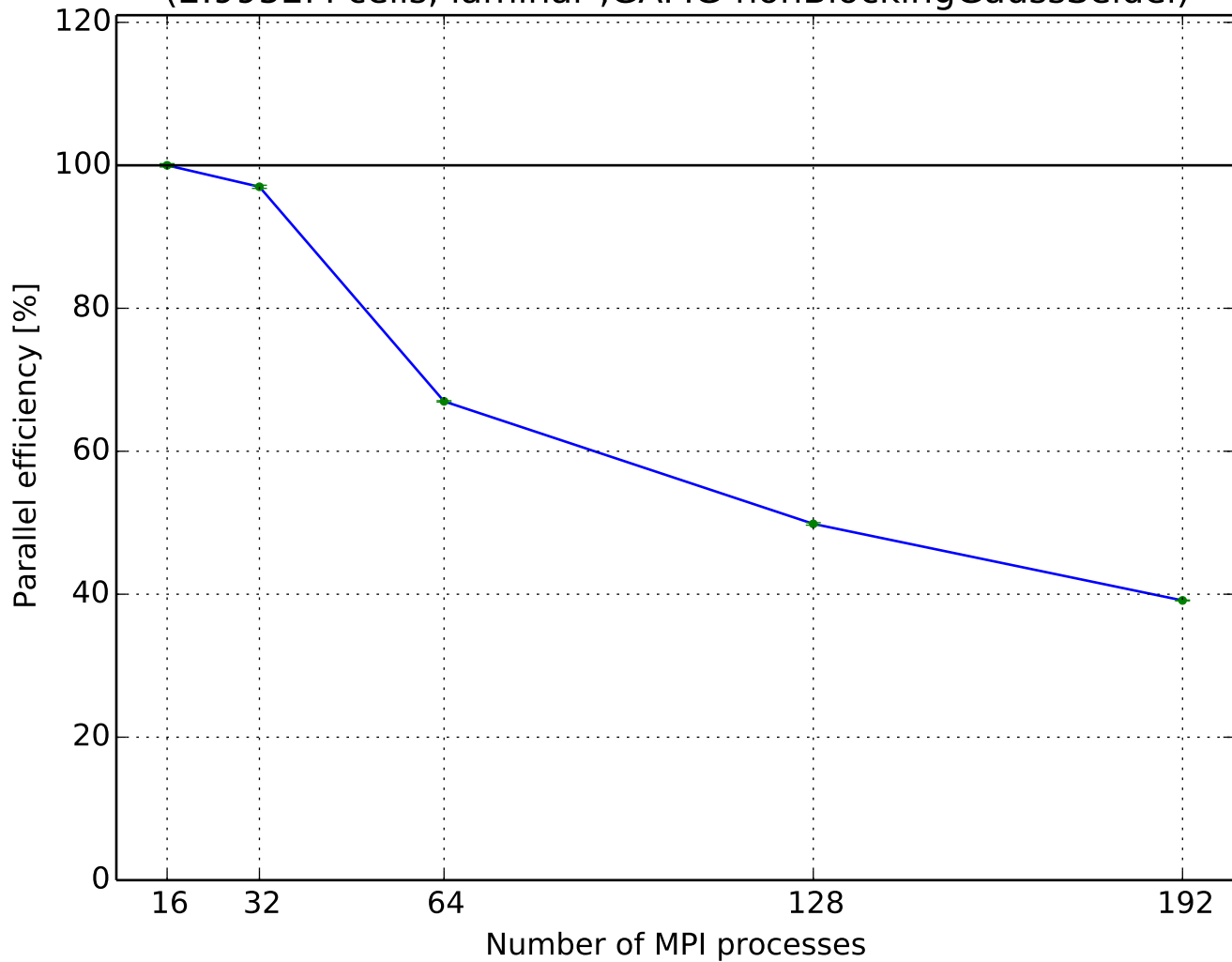
Execution time per time step
(2.9952M cells, laminar ,GAMG-nonBlockingGaussSeidel)



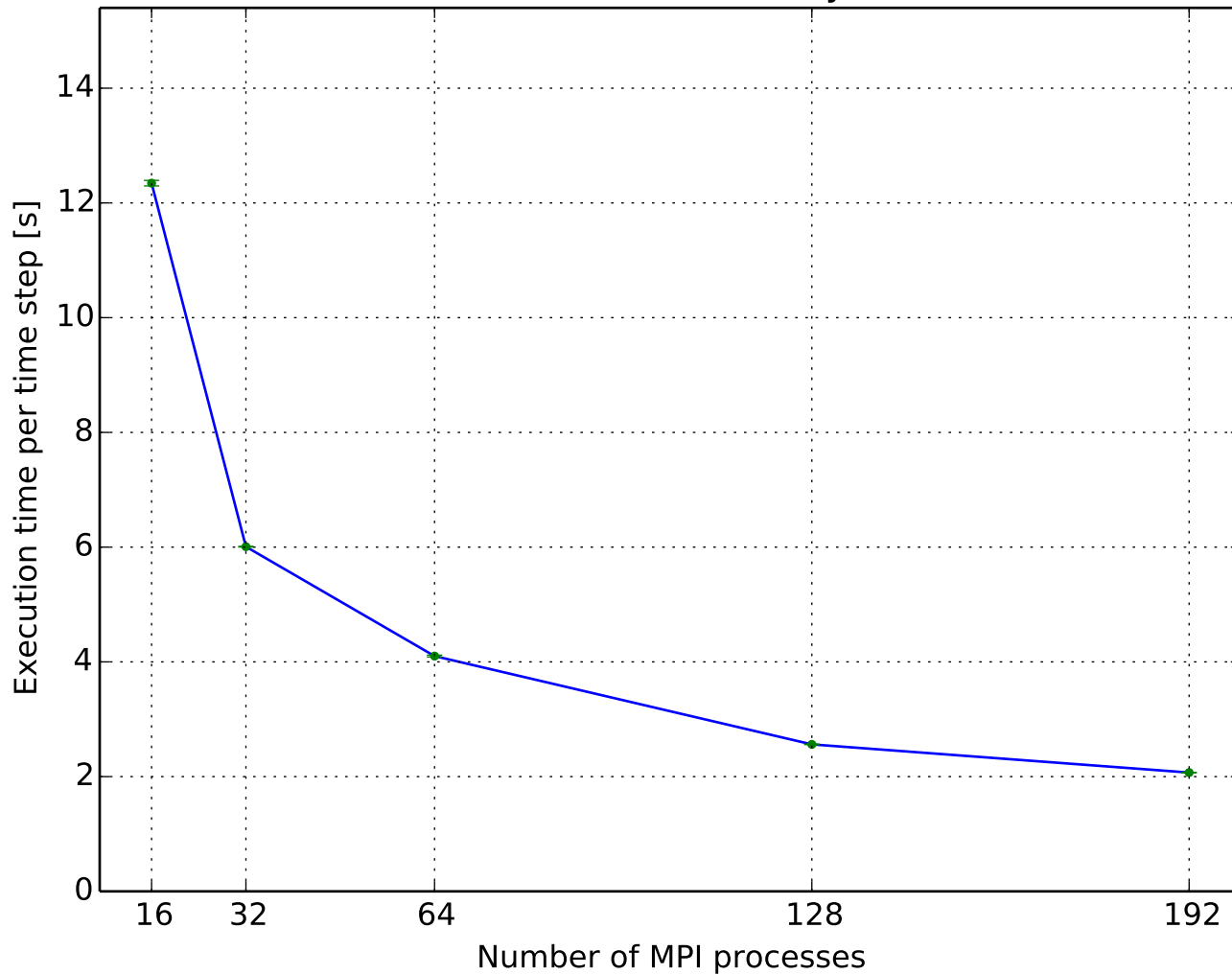
Speedup ratio
(2.9952M cells, laminar ,GAMG-nonBlockingGaussSeidel)



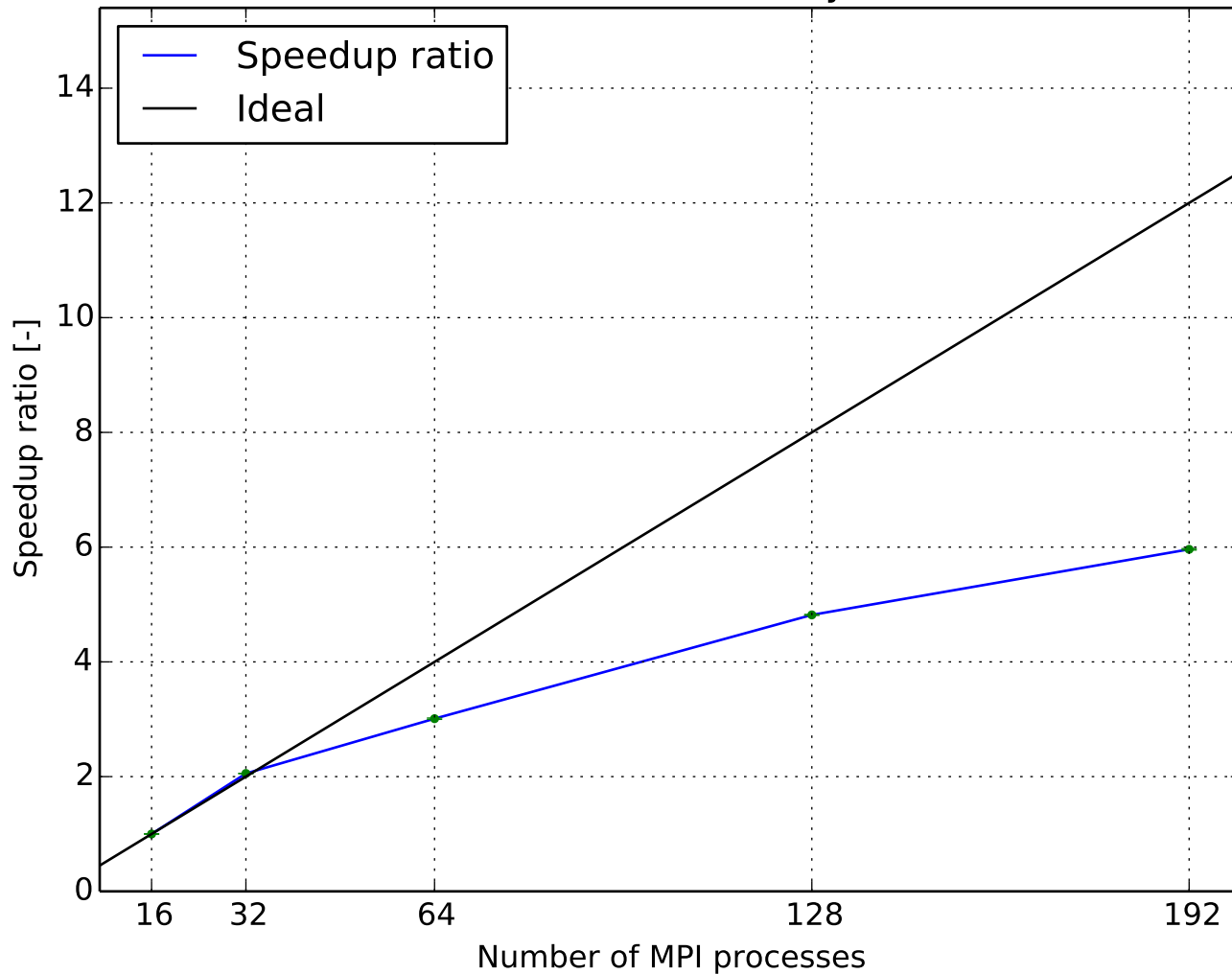
Parallel efficiency
(2.9952M cells, laminar ,GAMG-nonBlockingGaussSeidel)



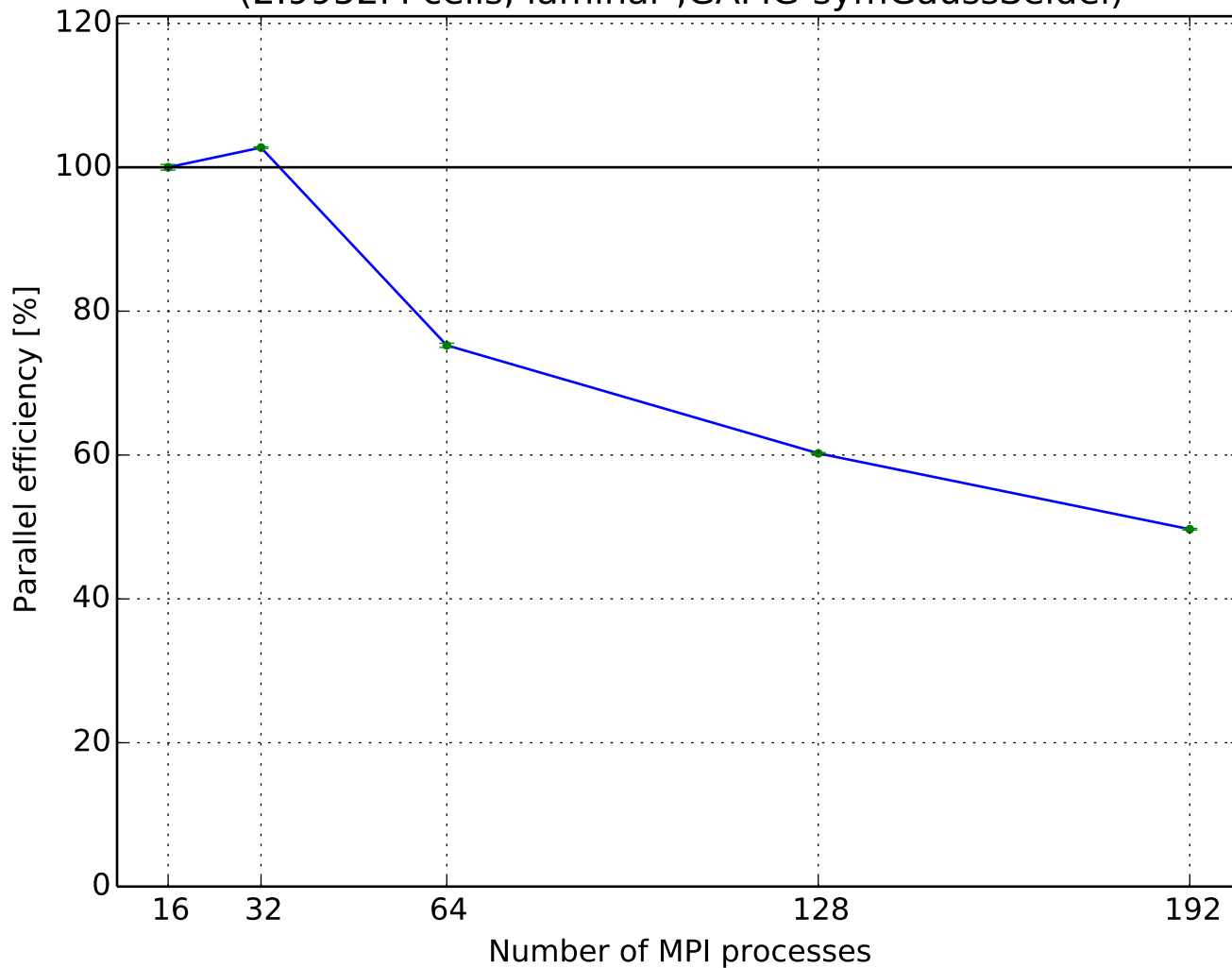
Execution time per time step
(2.9952M cells, laminar ,GAMG-symGaussSeidel)



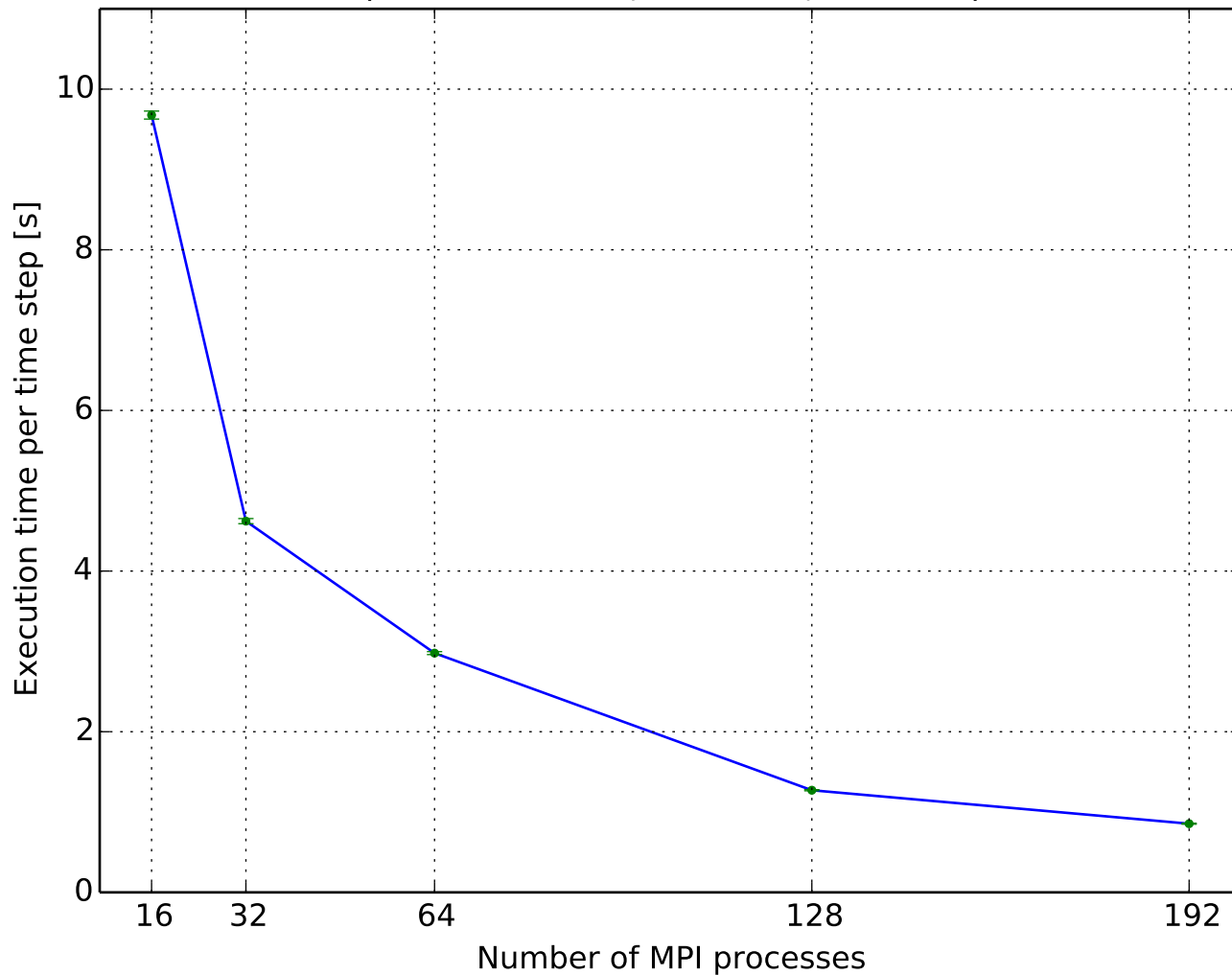
Speedup ratio
(2.9952M cells, laminar ,GAMG-symGaussSeidel)



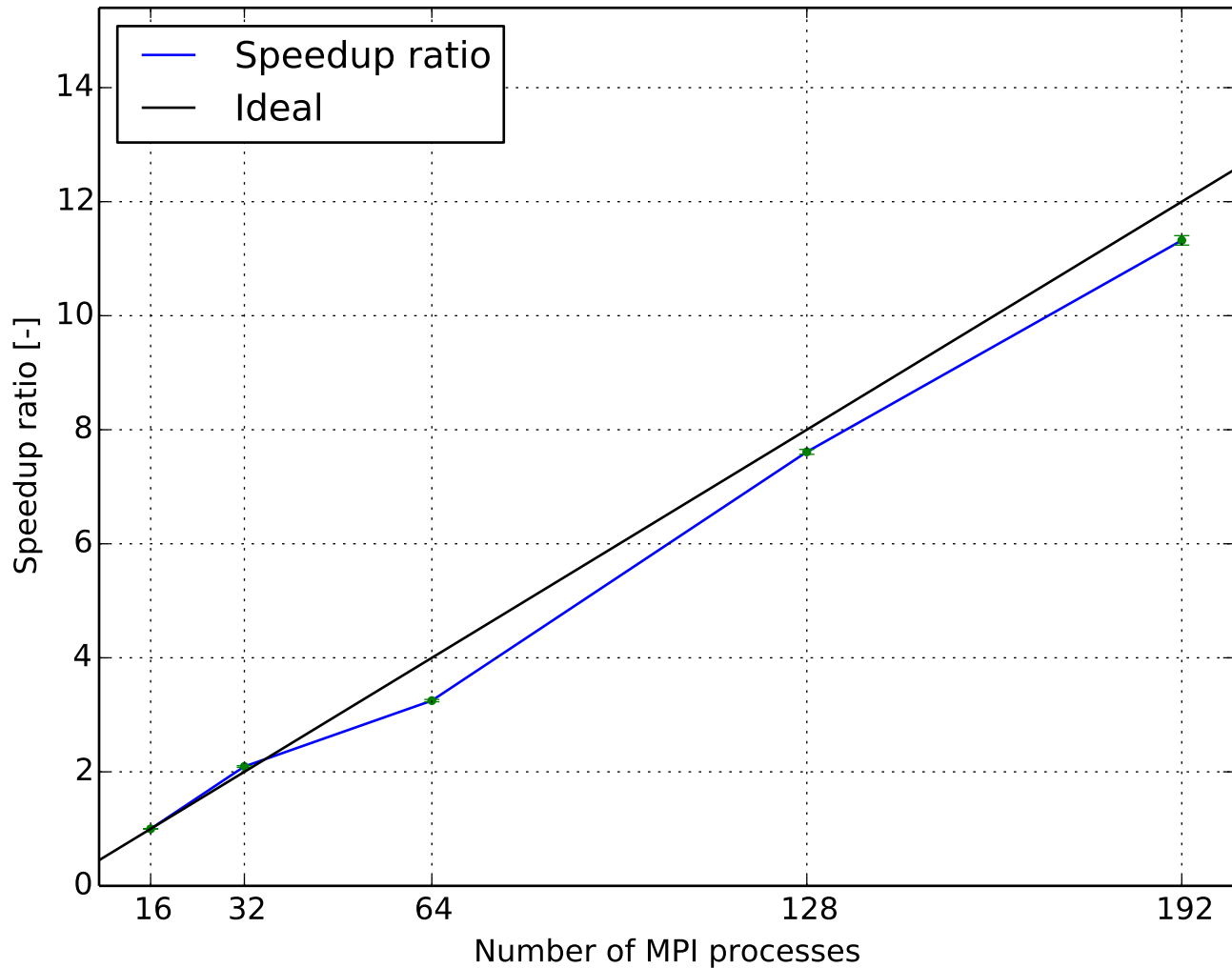
Parallel efficiency
(2.9952M cells, laminar ,GAMG-symGaussSeidel)



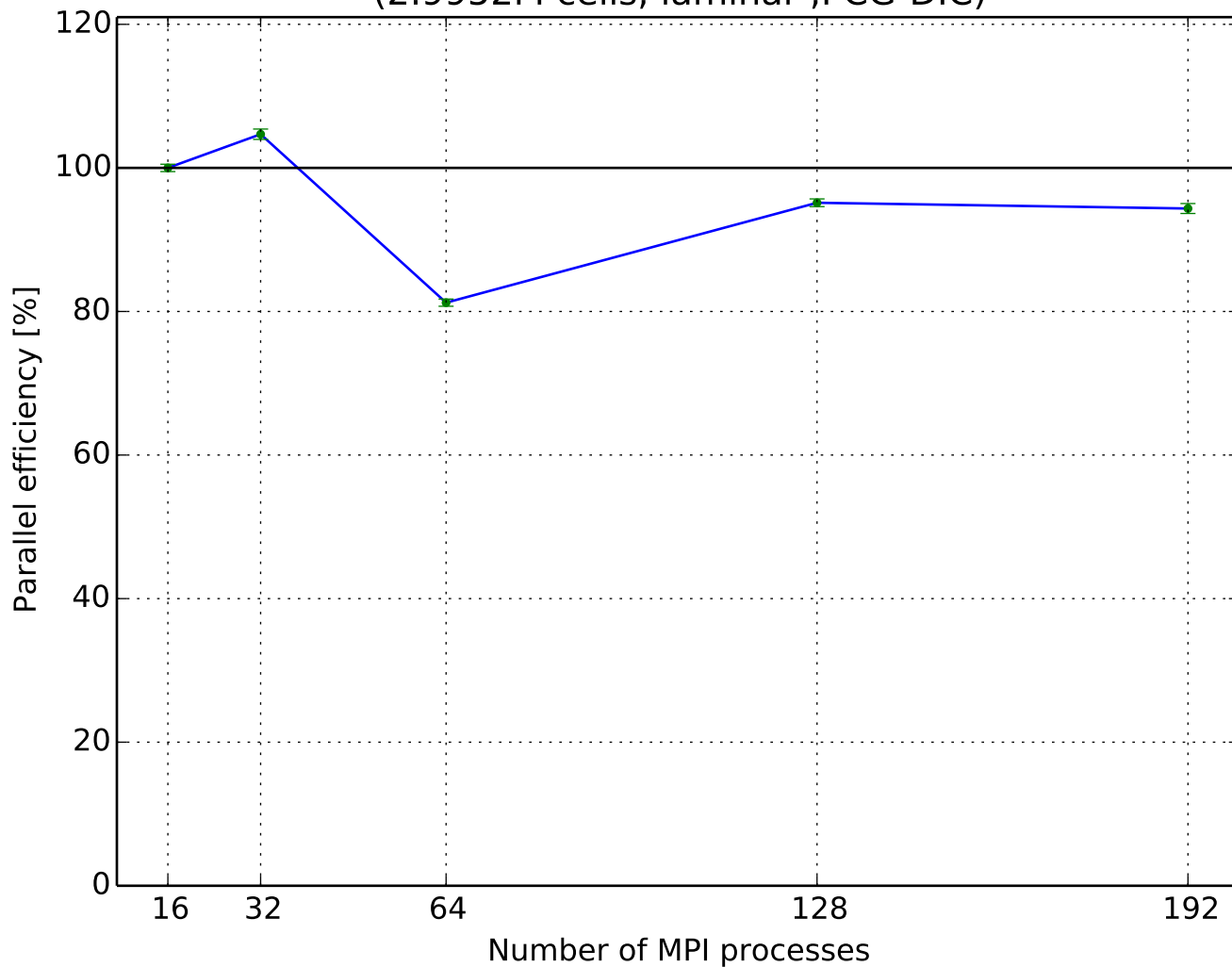
Execution time per time step
(2.9952M cells, laminar ,PCG-DIC)



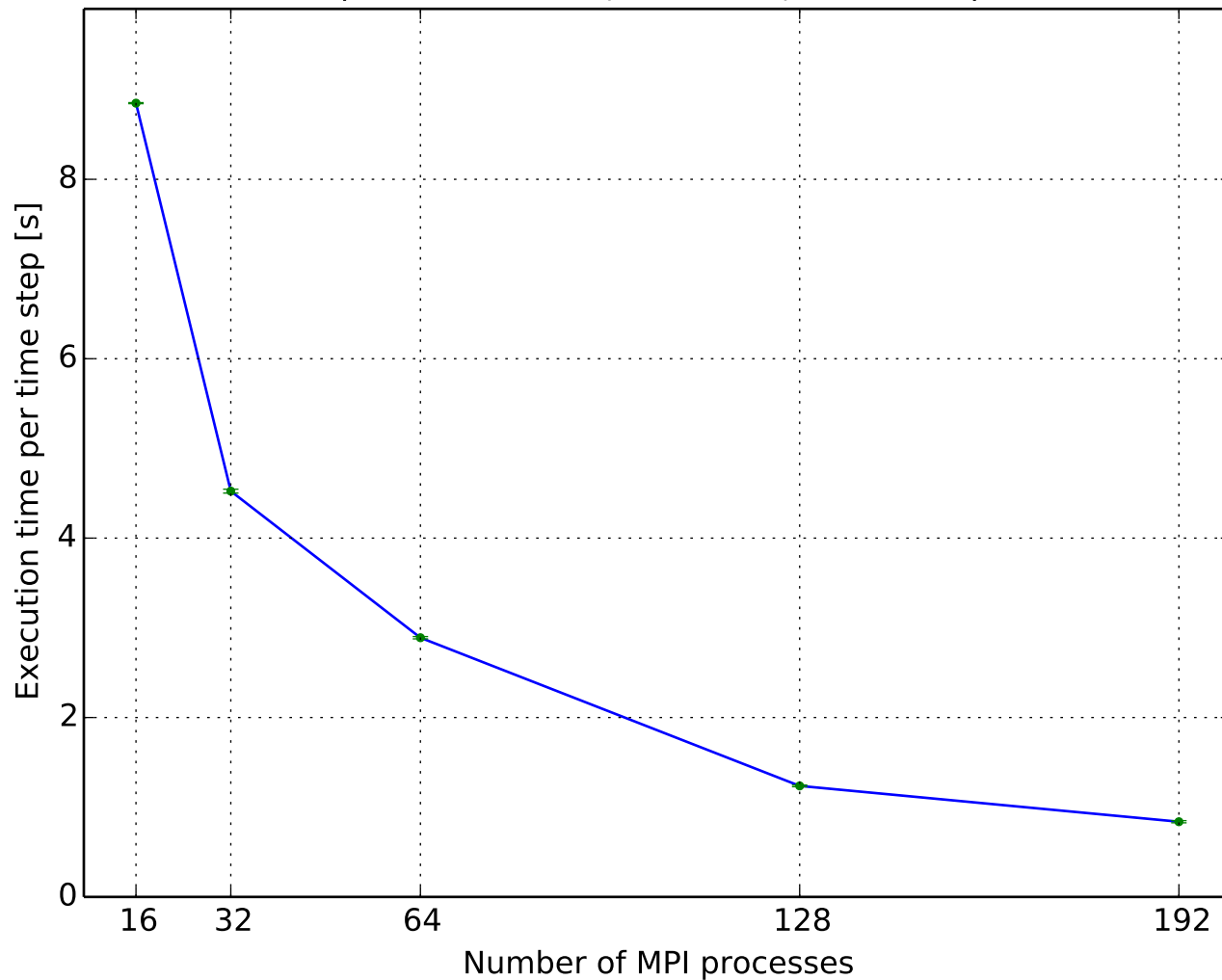
Speedup ratio
(2.9952M cells, laminar ,PCG-DIC)



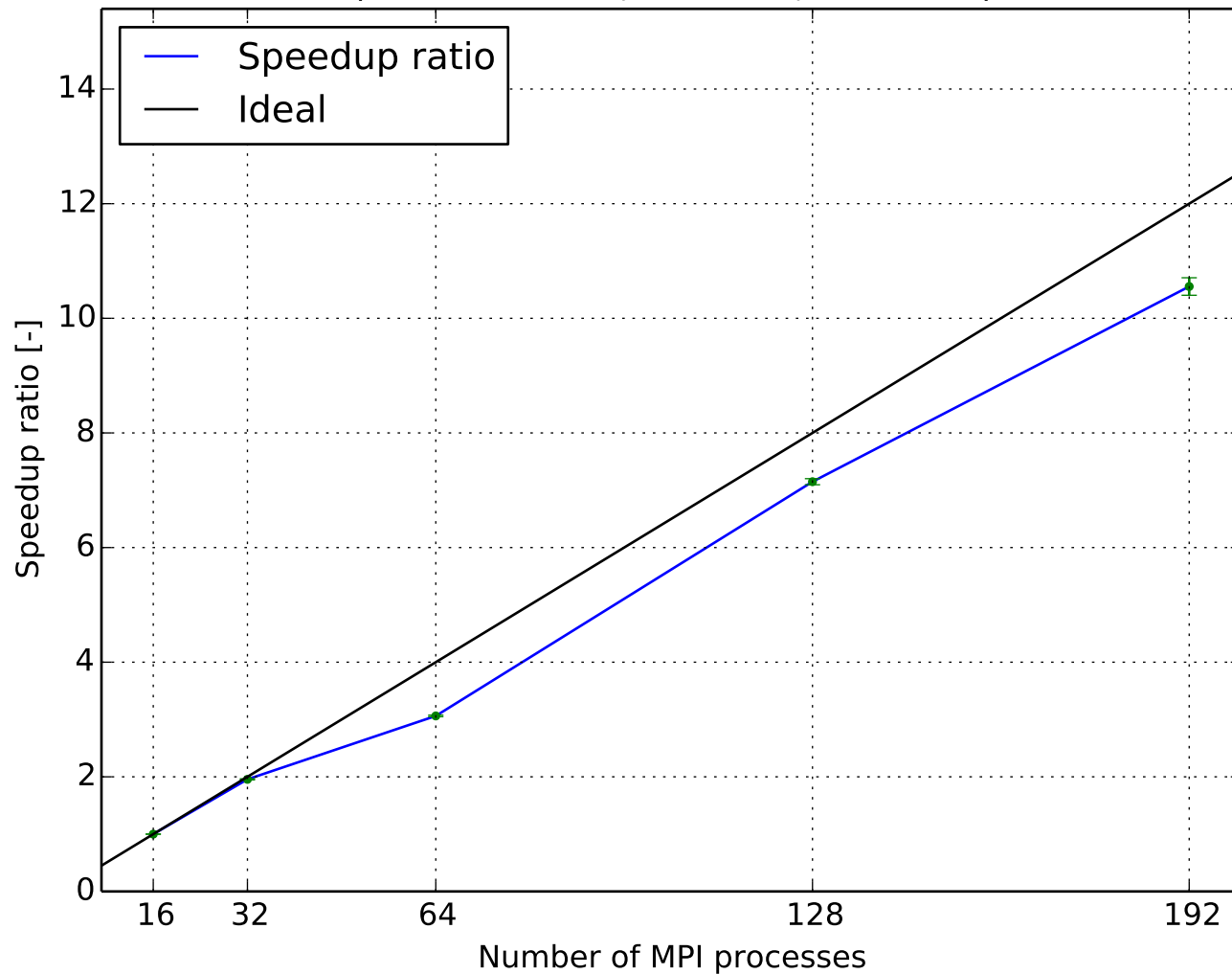
Parallel efficiency
(2.9952M cells, laminar ,PCG-DIC)



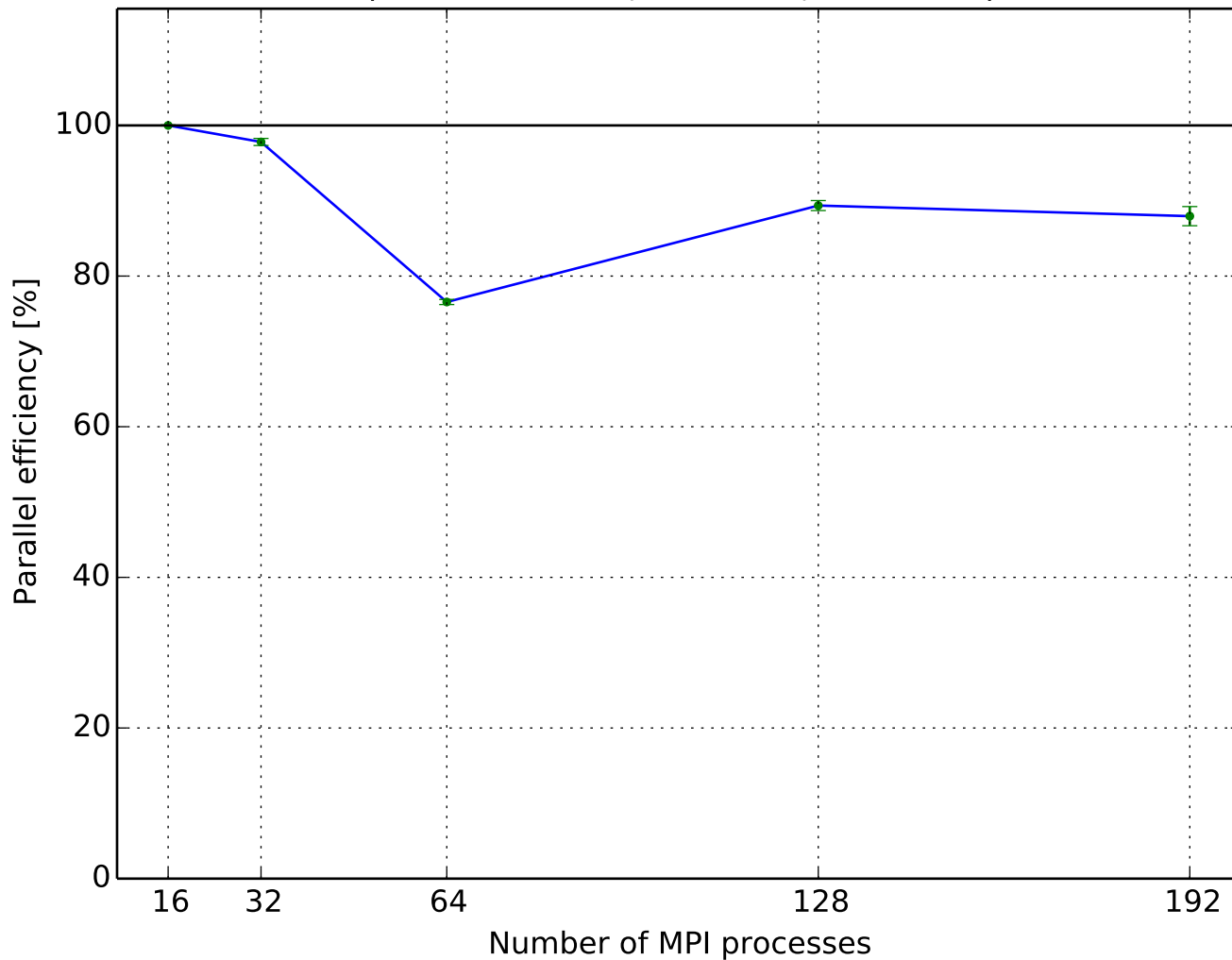
Execution time per time step
(2.9952M cells, laminar ,PCG-FDIC)



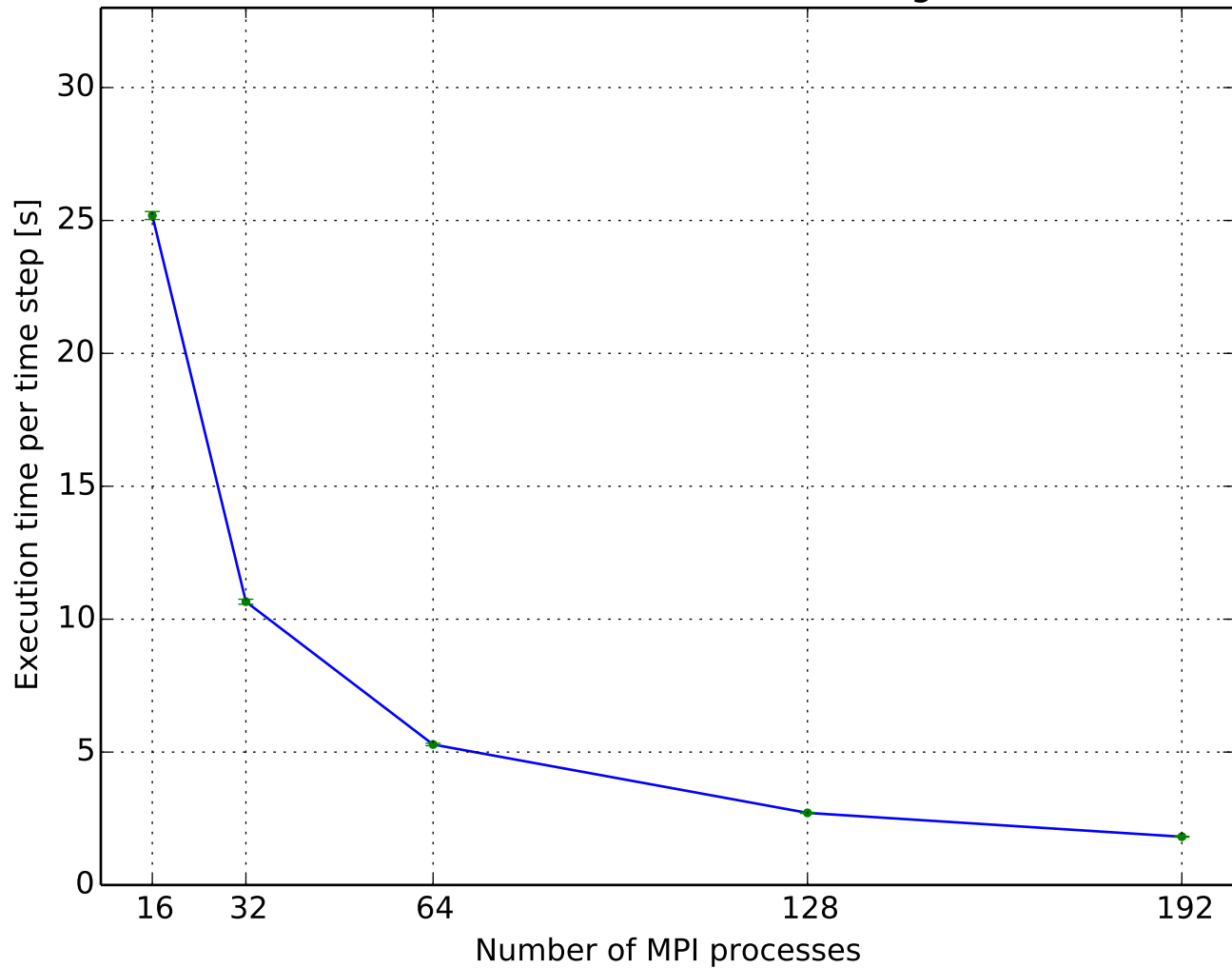
Speedup ratio
(2.9952M cells, laminar ,PCG-FDIC)



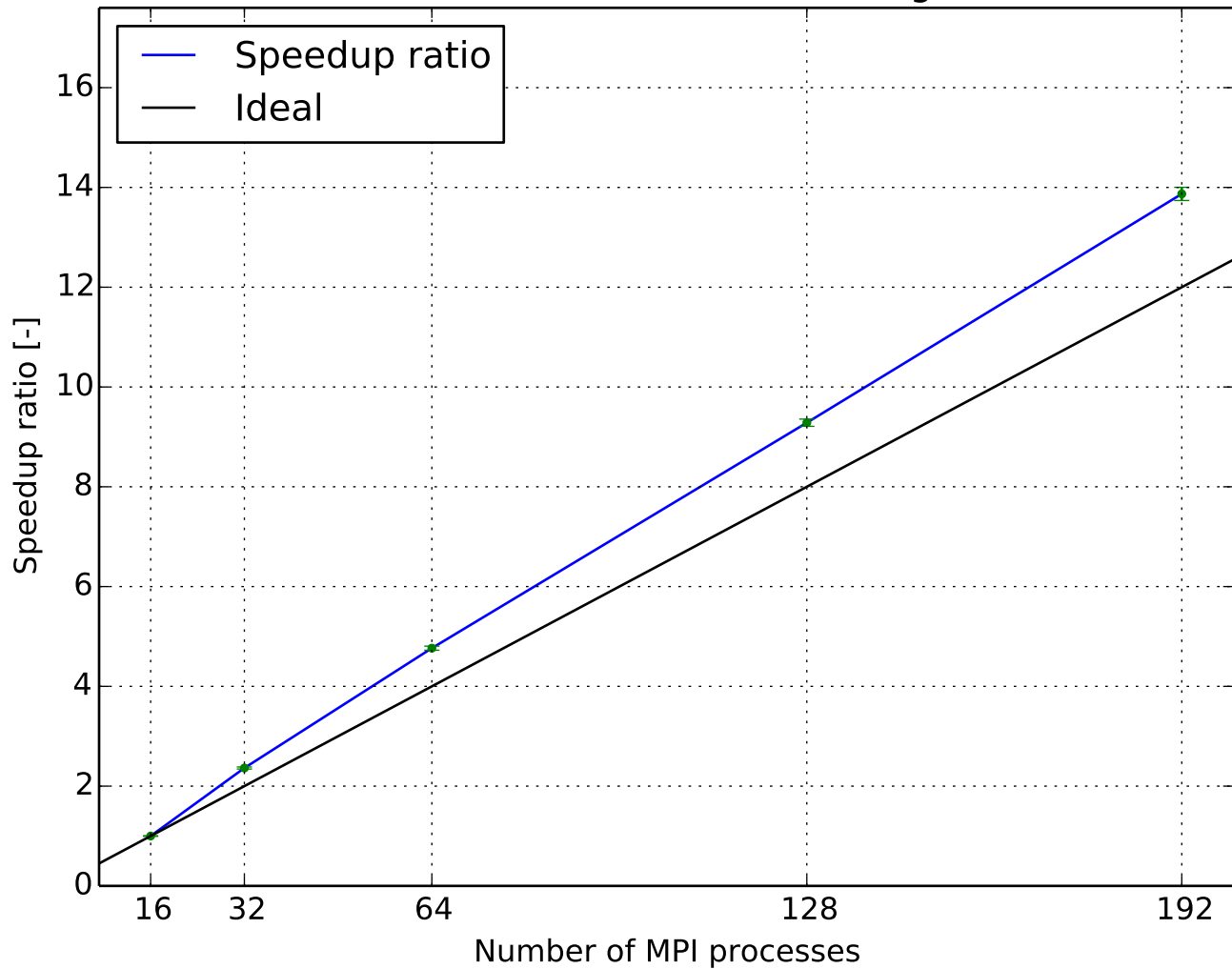
Parallel efficiency
(2.9952M cells, laminar ,PCG-FDIC)



Execution time per time step
(2.9952M cells, laminar ,PCG-diagonal)



Speedup ratio
(2.9952M cells, laminar ,PCG-diagonal)



Parallel efficiency
(2.9952M cells, laminar ,PCG-diagonal)

