

Arrows for Parallel Computation

Supplementary Material

MARTIN BRAUN
University Bayreuth, 95440 Bayreuth, Germany
OLEG LOBACHEV
University Bayreuth, 95440 Bayreuth, Germany
and PHIL TRINDER
Glasgow University, Glasgow, G12 8QQ, Scotland

Abstract

This is supplementary material to our paper ‘Arrows for parallel computation’. It shows the speedup and mean overhead plots for all benchmarks.

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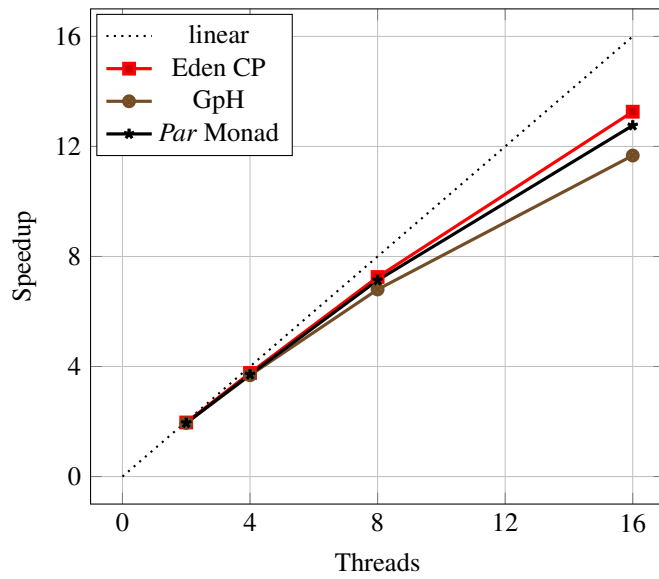
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1 Shared-Memory Plots

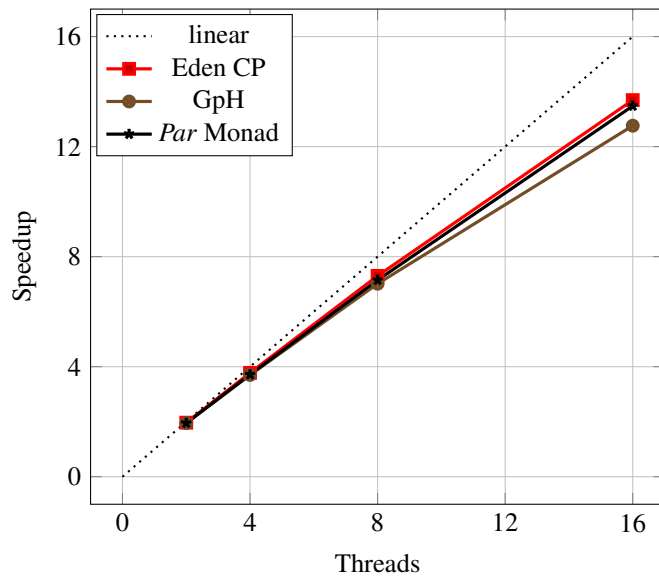
1.1 Rabin–Miller test

1.1.1 Speedup

Speedup of Rabin–Miller test '11213 32'



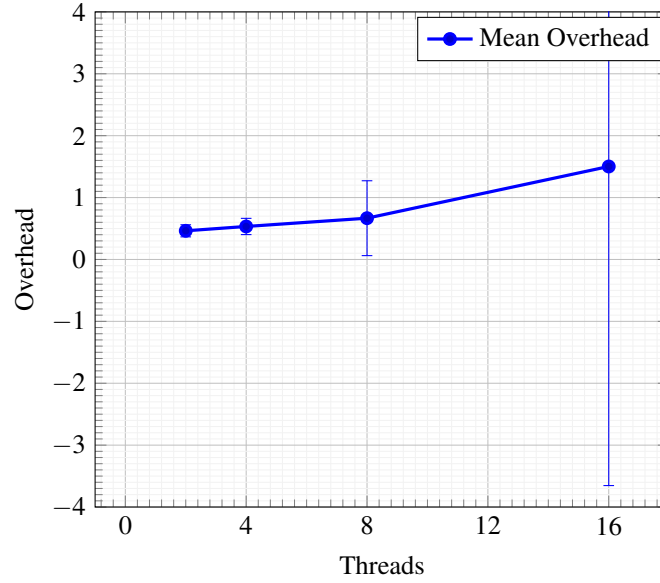
Speedup of Rabin–Miller test '11213 64'



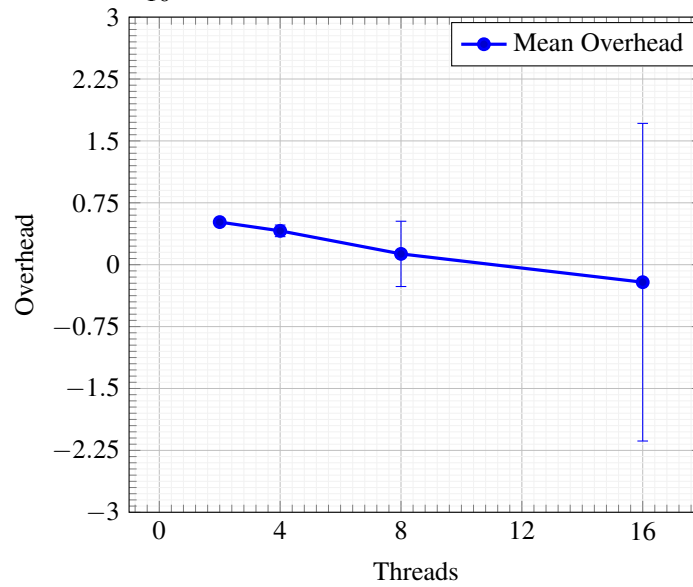
Arrows for Parallel Computation

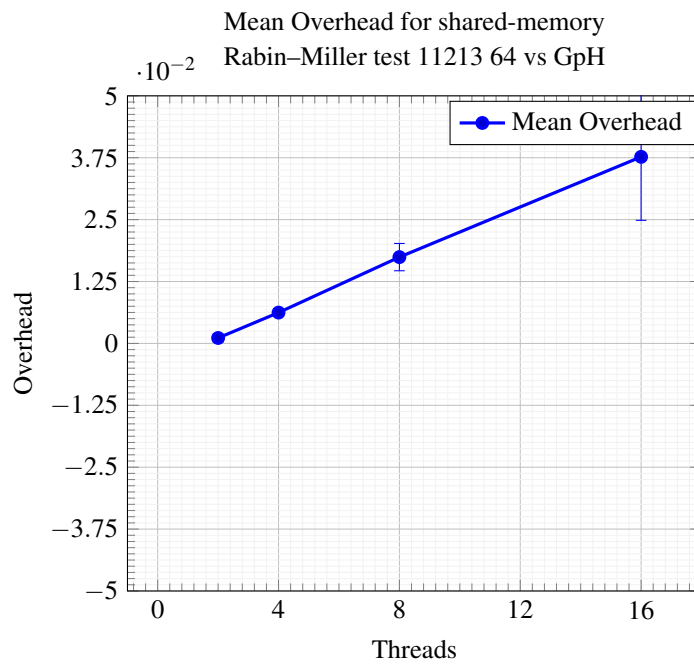
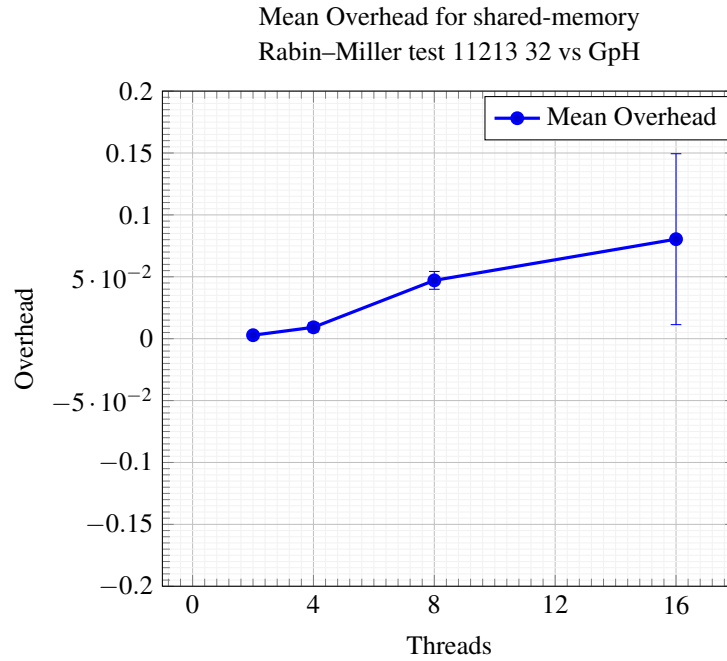
1.1.2 Overhead

Mean Overhead for shared-memory
.10⁻² Rabin-Miller test 11213 32 vs Eden CP

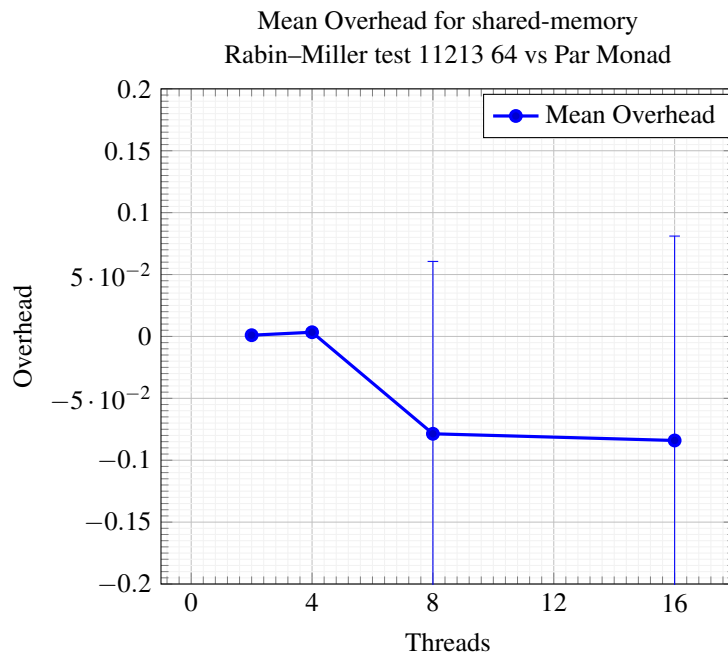
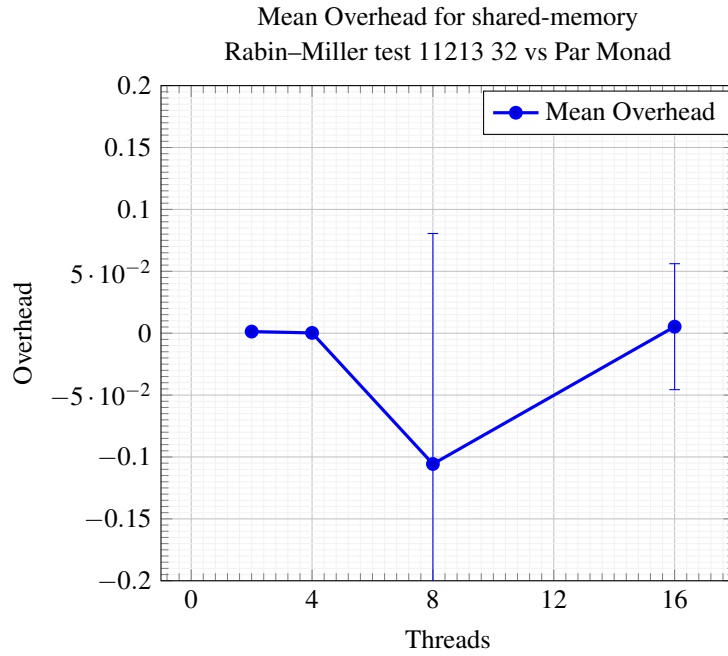


Mean Overhead for shared-memory
.10⁻² Rabin-Miller test 11213 64 vs Eden CP





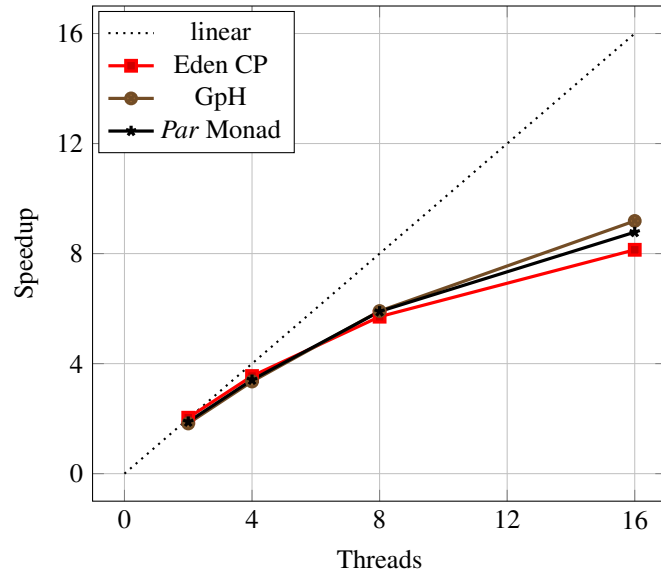
Arrows for Parallel Computation



1.2 Sudoku

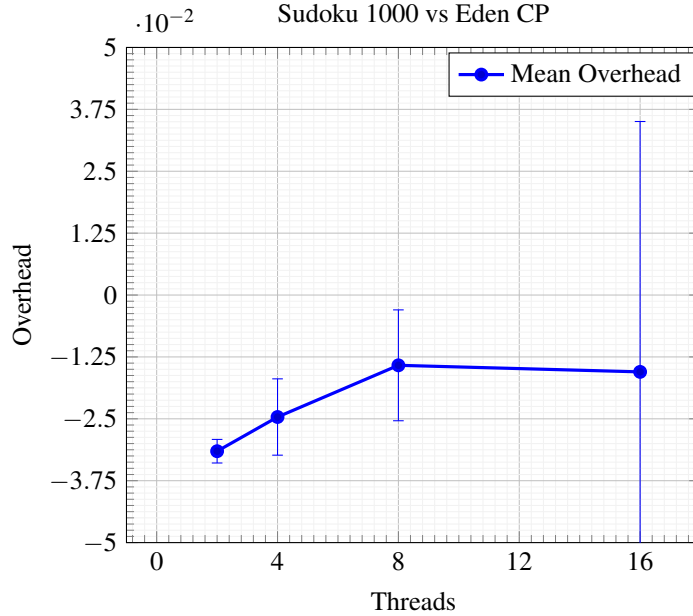
1.2.1 Speedup

Parallel speedup of Sudoku '1000'

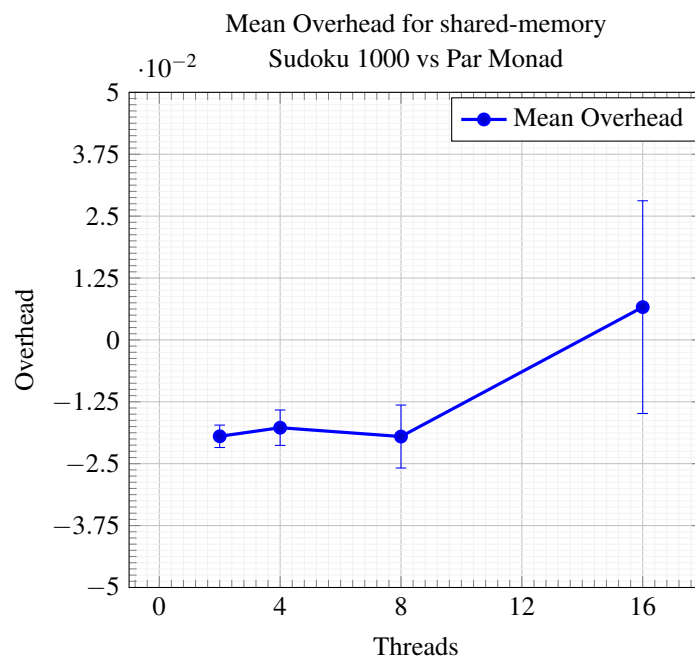
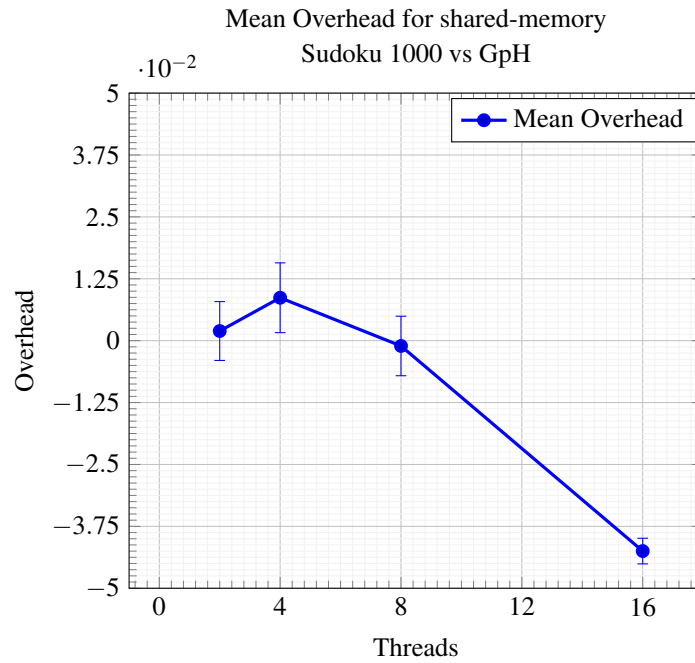


1.2.2 Overhead

Mean Overhead for shared-memory Sudoku 1000 vs Eden CP



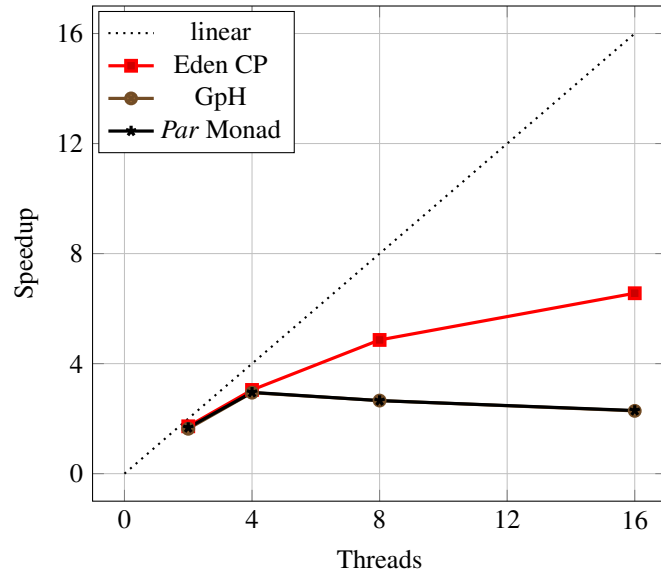
Arrows for Parallel Computation



1.3 Gentleman

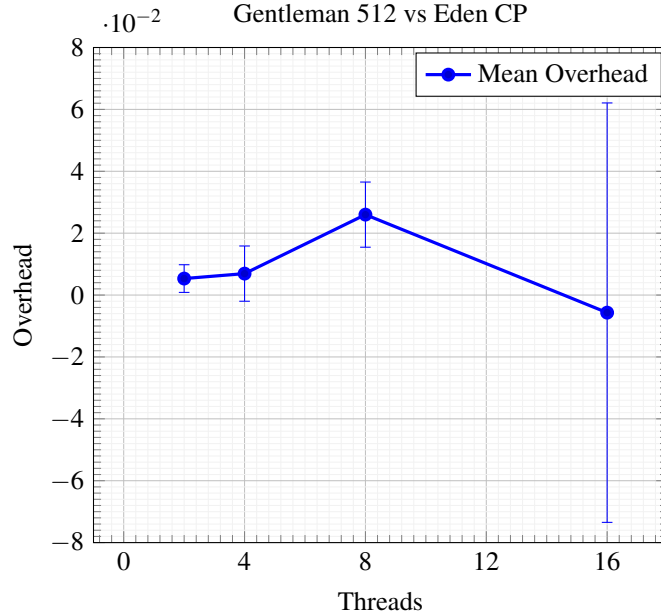
1.3.1 Speedup

Parallel speedup of Sudoku '512'



1.3.2 Overhead

Mean Overhead for shared-memory
Gentleman 512 vs Eden CP

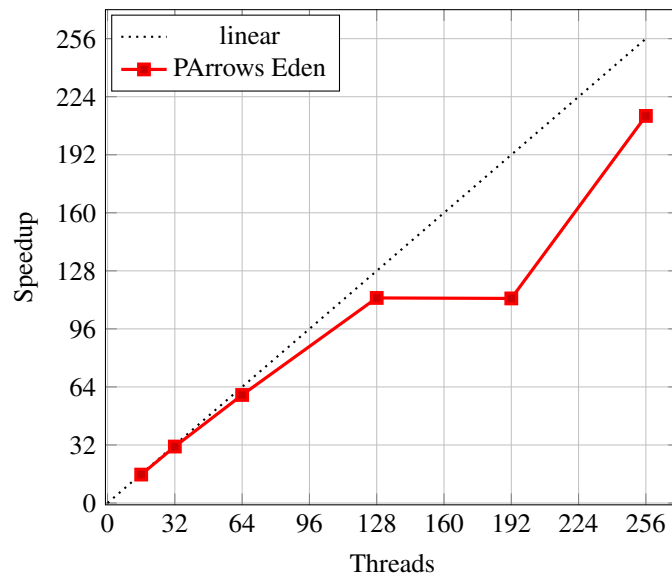


2 Distributed Plots

2.1 Rabin–Miller test

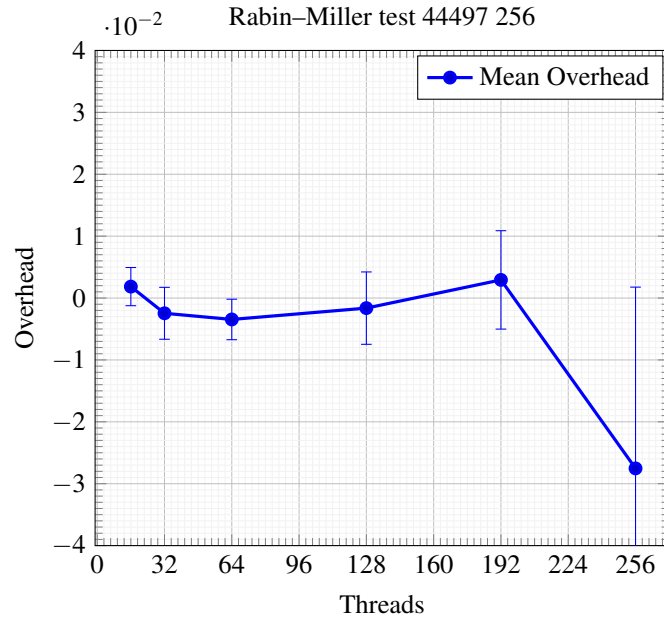
2.1.1 Speedup

Speedup of distributed Rabin–Miller test '44497 256'



2.1.2 Overhead

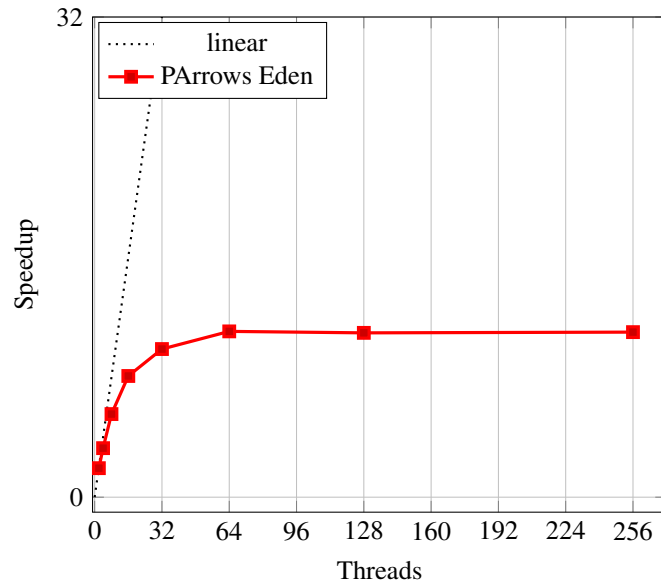
Mean Overhead for distributed Rabin–Miller test 44497 256



2.2 Jacobi sum test

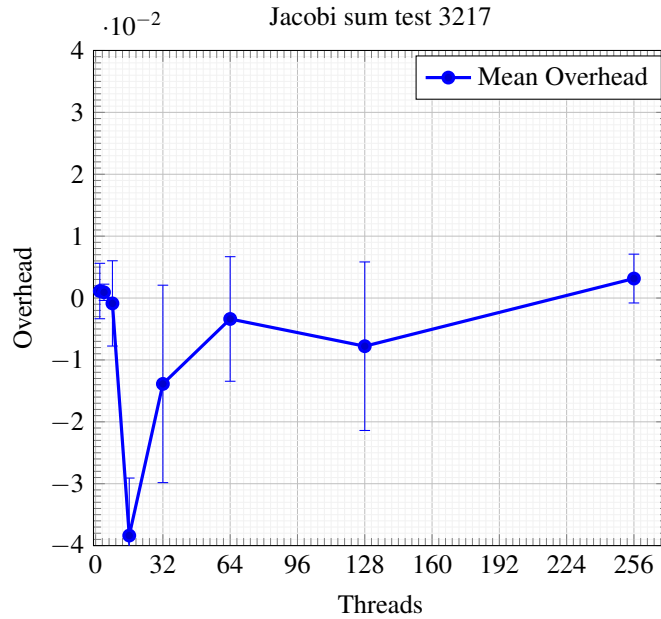
2.2.1 Speedup

Speedup of distributed Jacobi sum test '3217'



2.2.2 Overhead

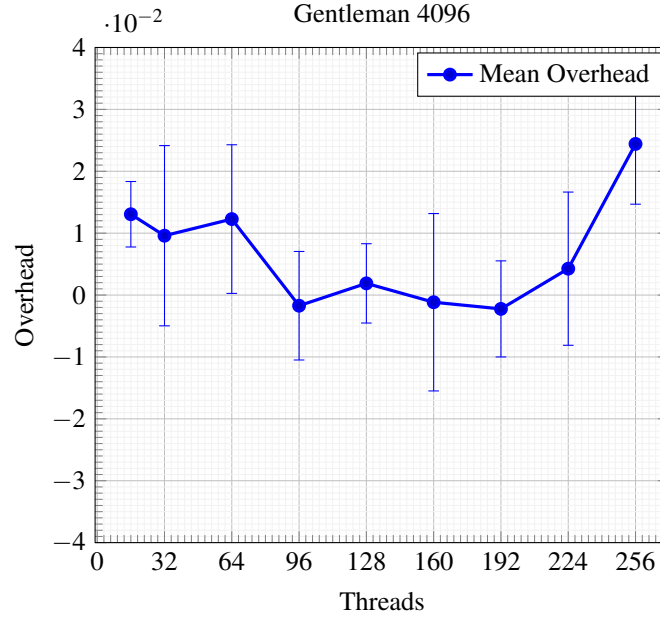
Mean Overhead for distributed Jacobi sum test 3217



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2.3 Gentleman

Mean Overhead for distributed Gentleman 4096



2.3.1 Speedup

Speedup of distributed Gentleman '4096'

