

Distributed Mandelbrot Set & DES Brute-Force Algorithm on the

“Cerberus” Beowulf Cluster (Case Study)

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Professional Development Grant

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“Developing Labs and Microlabs
For Adding Parallelism and
Distributed Computing into
Computer Science Curricula”

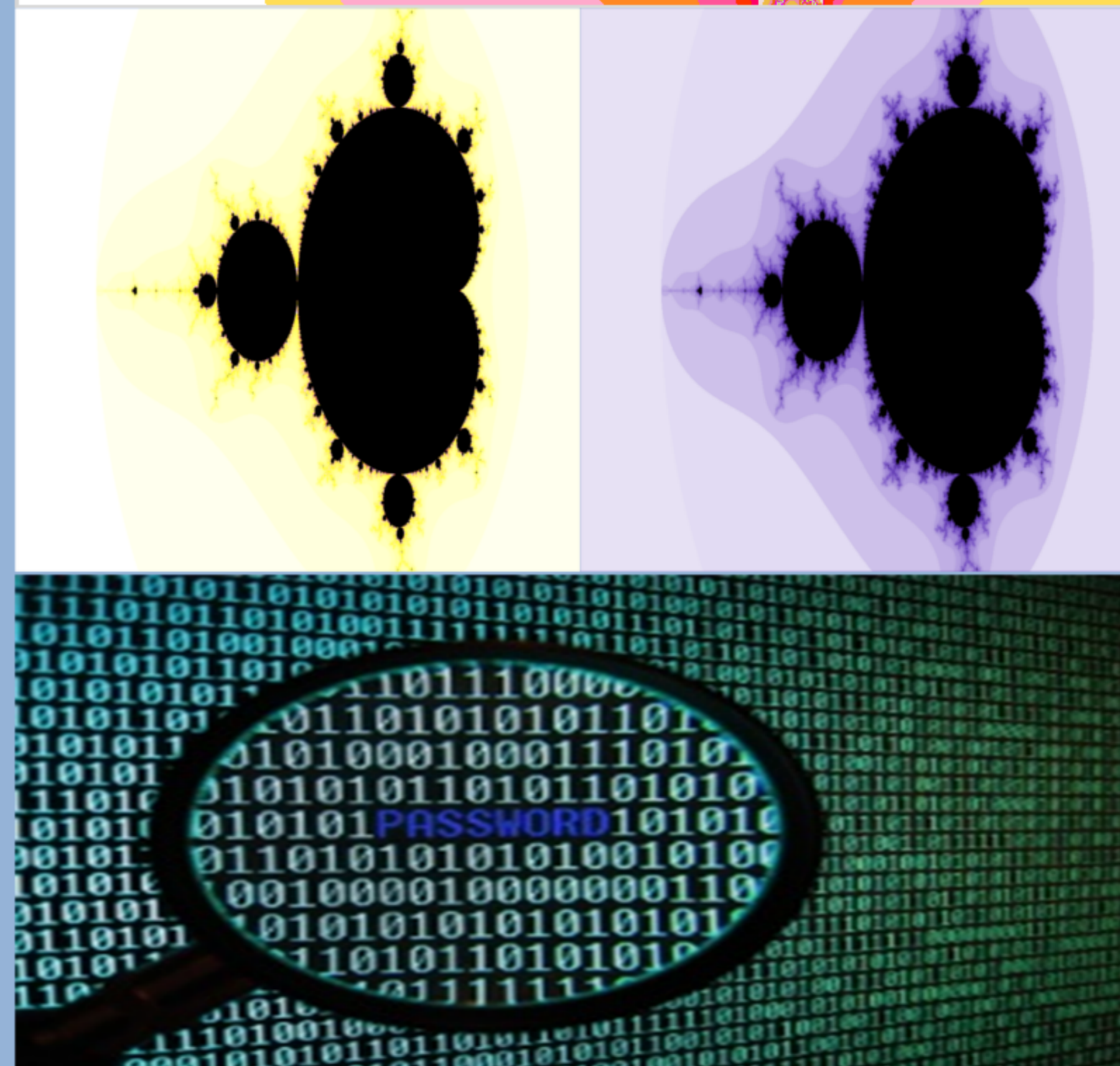
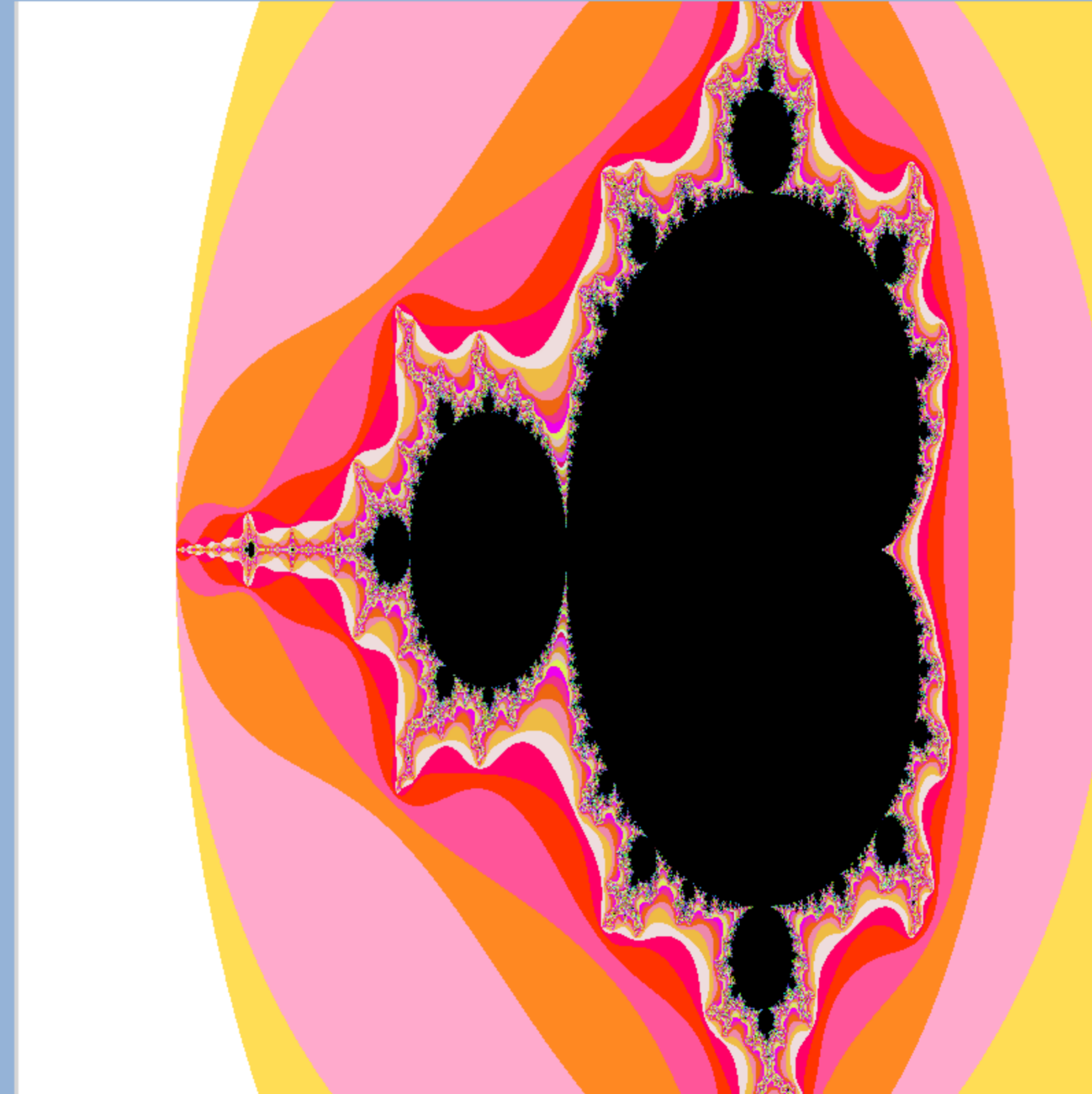


2



“Cerberus”
Beowulf
Cluster

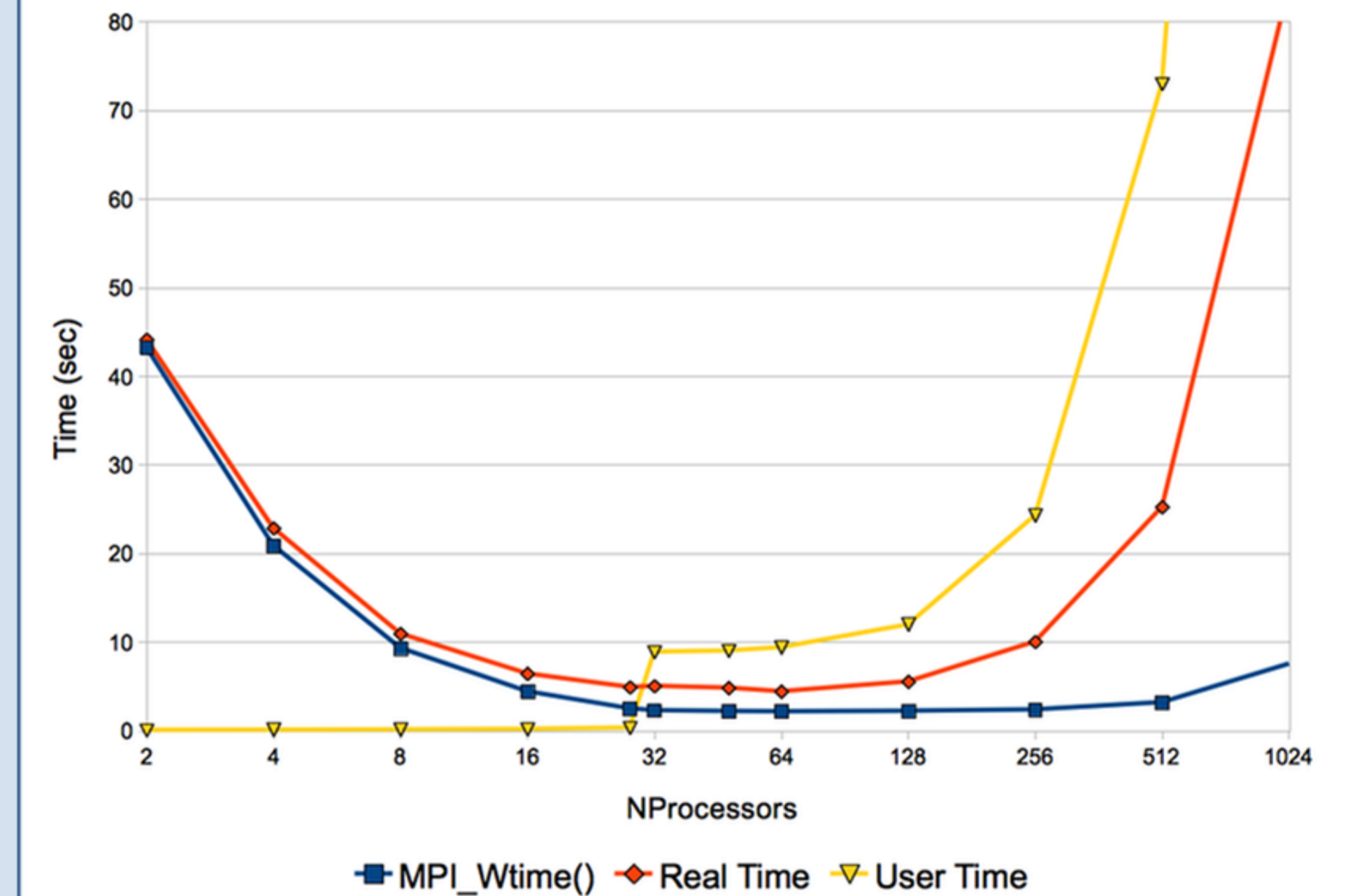
3



4

MandelBrot Generation Time vs Number of Processors

Dimensions:500px, IterationDepth:1000, Blocks:400, Pixels/Block:625



Top Plot Params (800x800px, IterationDepth:100)
Mid Left Plot Params(850x850px, IterationDepth:10000)
Mid Right Plot (GIMP'd version of Mid Left Plot)
Bottom Picture (Placeholder for Jeff's work, he could not make it)

Performance of TotalJobs to JobSize Ratios

NProcessors:32 Dimensions:500px IterationDepth:500

