

# A Parallel and Memory Efficient Algorithm for Constructing the Contour Tree Supplemental Figures

Aditya Acharya Vijay Natarajan

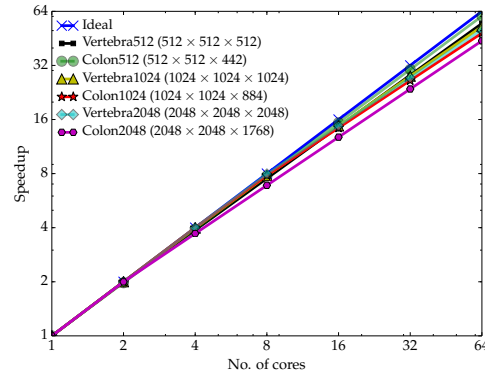


Figure 1: Speedup for the local join and split tree computation.

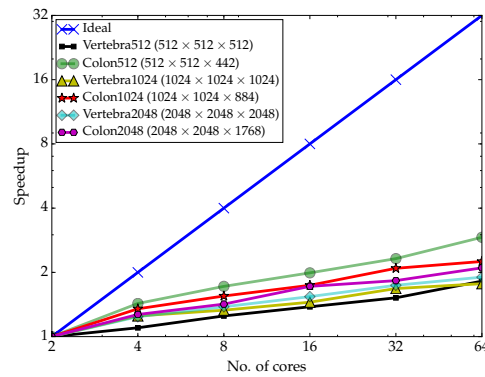


Figure 2: Speedup for the stitching step. Stitching is relevant only when the number of cores is at least 2.

Model	#Vertices	#Nodes in contour tree
Vertebra	$512 \times 512 \times 512$	5.3M
ColonPhantom	$512 \times 512 \times 442$	22.9M
Vertebra1024	$1024 \times 1024 \times 1024$	30.6M
ColonPhantom1024	$1024 \times 1024 \times 884$	134.6M
Vertebra2048	$2048 \times 2048 \times 2048$	122.6M
ColonPhantom2048	$2048 \times 2048 \times 2048$	400.2M

Table 1: Number of nodes in the final pruned contour tree. The minimum memory required by DivCT is comparable to the size of this tree.