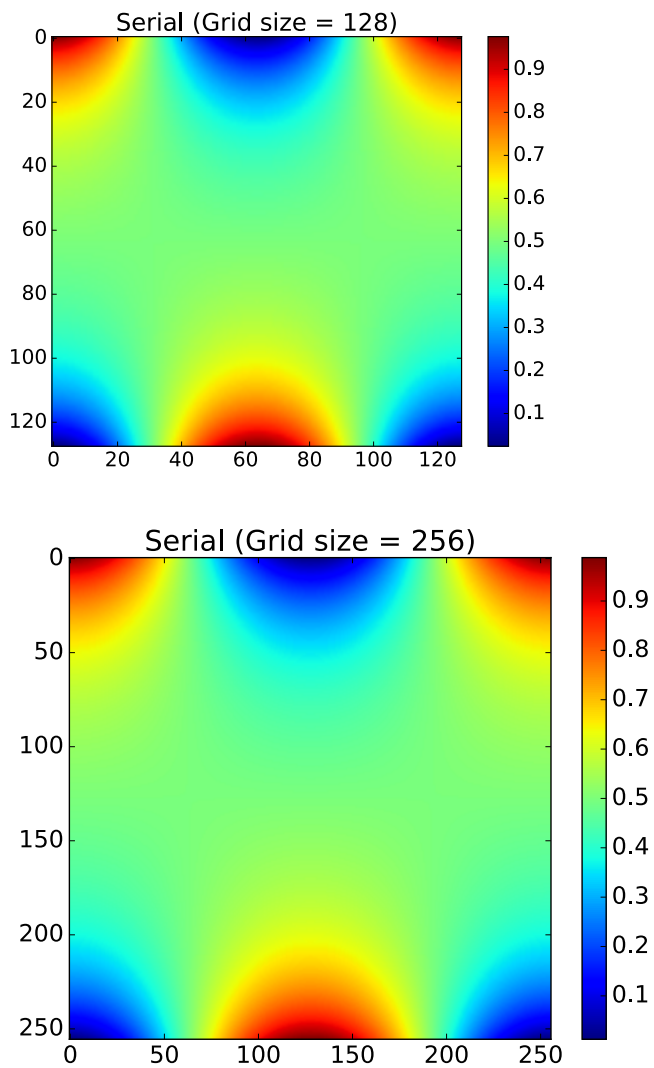


Apc 524
Hw4

Figure 1 below shows the simulation results from heat_serial. It is seen that there is not much difference when varying grid size from 128 to 512, indicating that the size of 128 is already (visually) fine enough.



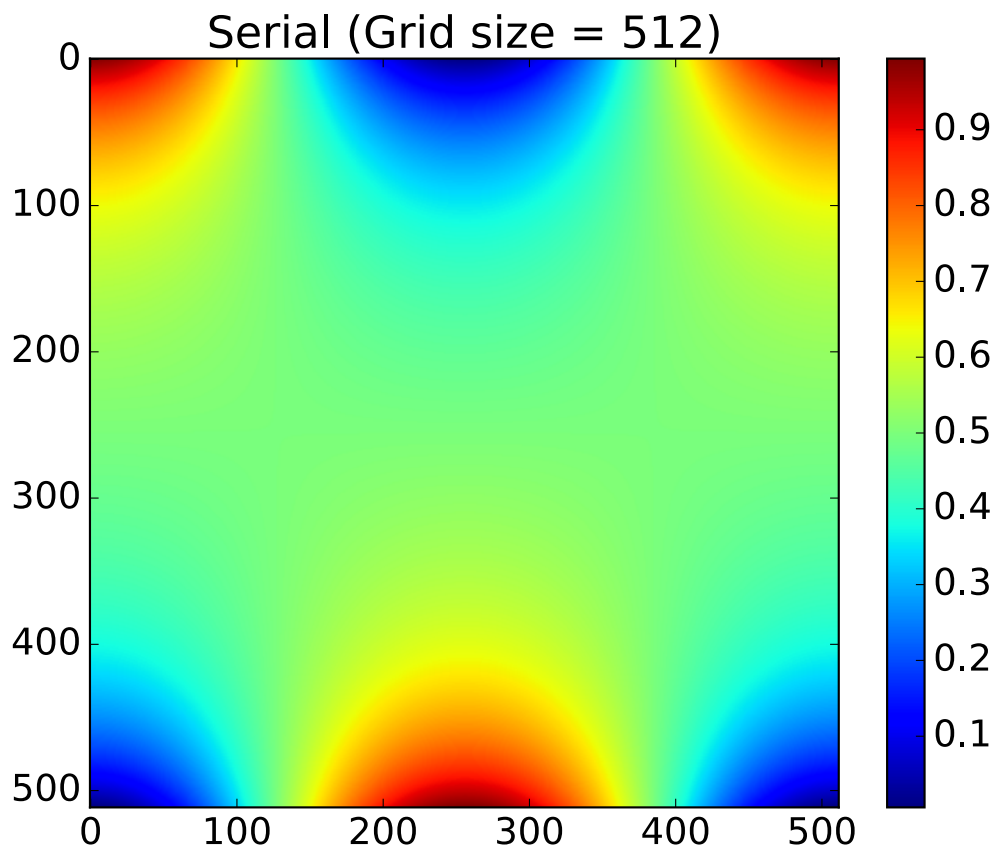


fig 1.

The average temperature for the serial case as well as the MPI case is reported in table 1.

Table 1.

Temperature	grid size		
	128	256	512
serial	0.496150	0.498060	
1			
2	0.499975	0.499976	0.499976
MPI			
4	0.499973	0.499975	0.499976
8	0.499969	0.499973	0.499975
16	0.499959	0.499969	0.499973

