Miles Van de Wetering

Parallel Project 2

N-Body Problem

I ran my code on flip3, for no particular reason. My results are graphed below.

Threads

Performance  
(forces per second)

My results for the coarse-grained parallelism make some sense to me. It seems as if the overhead of assigning tasks to threads is outweighing the benefit gained by divvying up work dynamically when the thread count is large. This makes sense to me because if two threads are balanced unevenly, that might create a disparity of, say, size n. However, if 4 threads are balanced equally unevenly, the disparity would be only of size n/2.