

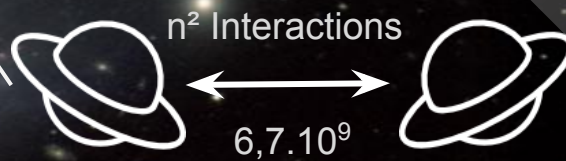
GALA

EIRB

High Performance Embedded Computing - SE301



Num. of particles	Total particles	Galaxy	Element
16384	16384	Milky way	disk
16384	32768	Andromeda	disk
8192	40960	Milky way	bulge
8192	49152	Andromeda	bulge
16384	65536	Milky way	halo
16384	81920	Andromeda	halo

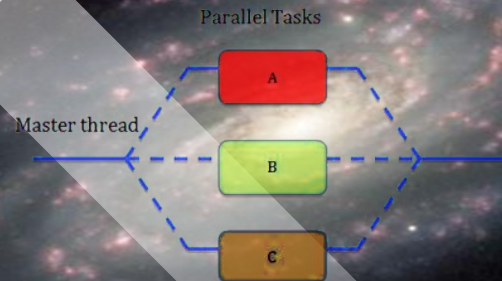


Position
Acceleration
Mass

NVIDIA Jetson TK1 development board



OpenMP
Enabling HPC since 1997



-pragma omp parallel for
-local variable

-2048p → 120 FPS



-512 threads
-1024 p → 800+ FPS

-Coalesced access
-shared memory

