## AMD Ryzen 2700X + NVIDIA GTX 1080Ti 16 GPU CPU [1T] CPU Total Execution Time [ms] -- cuda memcpy HToD CPU TBB [16T] -- cuda memcpy DToH cuda memset -- build tiles S 00 Total Execution T -- calculate density -- calculate separation - promote seeds -- assign clusters 200 --- other GPU GPU vs. CPU [1T] Speedup 10<sup>1</sup> CPU TBB [16T] vs. CPU [1T] 51X 50X 51X 48X 45X 43X 44X 37X 34X 25X 4.1X 4.2X 4.3X 4.0X 3.6X 3.7X 3.3X 2.8X 2.4X 1.4X $10^{0}$ 9 10 Number of Points per Layer [10<sup>3</sup>]. Totally 100 layers.