ORNL Titan: Strong Scaling **Executable**: Synapse emulating Gromacs simulations of BPTI protein with #atoms Configuration: 1 Executor; Orte; OpenMPI commit # Workload: rp.session.titan-ext2.itoman.017467.0000: **16384** tasks; ?? cores/task; 32816 cores;  $\approx$ ??s/task Measures: Timestamps of units Scheduler Starts Schedule CU Changes Dir Executable Starts CU Stops Post-executed Executor Stops Mkdir CU Starts Pre-execute Scheduler Stops Schedule Executor Spawns CU Executable Stops Executor Stops Scheduler Queues CU Scheduler Starts Unschedule OS Accepts Spawned CU CU Stops Pre-execute CU Spawn Returns CU Starts Post-execute Scheduler Stops Unschedule Executor Starts OS Spawns CU CU Spawns Executable Executor Starts Mkdir 95000 92500 90000 Time (s) 87500 85000-82500-80000-2500 5000 7500 12500 10000 15000 Number of Units