

Lessons from Benchmarks

- In realistic simulations, the cost of the underlying dynamics dominates OpenPathSampling's performance
- The overhead from OpenPathSampling is less than the variance due to Gromacs's performance tuning
- Only large systems should be run on multiple GPUs with Gromacs

Computational Cost

Molecular Dynamics: $\mathcal{O}(N_{\text{atom}} t)$

Path Sampling: $\mathcal{O}(N_{\text{traj}} N_{\text{ens}} N_{\text{atom}} t)$