

# Conclusions and Status

**Replica Exchange Transition Interface Sampling can be parallelized using dask.distributed, a task-based programming framework**

Still in development before release:

- Supports toy engine; needs further work to support OpenMM, LAMMPS, Gromacs
- Not fully integrated into the OPS path sampling “main” loop

Challenges we found:

- Serialization is either trivial or very difficult (nothing in between!)
- When the bottleneck is communication, that's always expensive

# Acknowledgments

- E-CAM/PRACE High Throughput Computing Team
  - Mariusz Uchroński (Wrocław University of Science and Technology)
  - Adam Włodarczyk (Wrocław University of Science and Technology)
  - Alan O'Cais (Jülich Supercomputing Centre)
- OpenPathSampling Team
  - Jan-Hendrik Prinz (Keylight GmbH)
  - Peter Bolhuis (University of Amsterdam)
  - John Chodera (Memorial Sloan Kettering Cancer Center)

