**Benchmarks (solid effect)**

**Calculating 1E6 matrix products:**

Matlab (s): 2.50, 2.51

Python + NumPy (s): 3.94, 3.90

*These speeds are concerning. Perhaps there is an issue with Python libraries? Test on Laptop with Anaconda also, look into BLAS linking.*

**Calculating 1E5 Kronecker products:**

Matlab (s): 4.18

Python + NumPy (s): 7.33, 7.34, 7.41

**Calculating 1E4 matrix exponentials:**

Matlab (s): 2.02

Python + NumPy (s): 6.77, 6.70, 6.73

**Calculating Hamiltonian:**

Matlab (s): 0.037593

Python + NumPy (s): 0.892, 0.885, 0.887

Python + F2PY (s): 0.070, 0.070, 0.070

Python + F2PY + OpenMP (s): 0.023, 0.025, 0.022

**Calculating Liouville space propagator:**

Matlab (s):

Python + NumPy (s): 16.3, 16.6, 16.4

**Calculating sub rotor polarisation:**