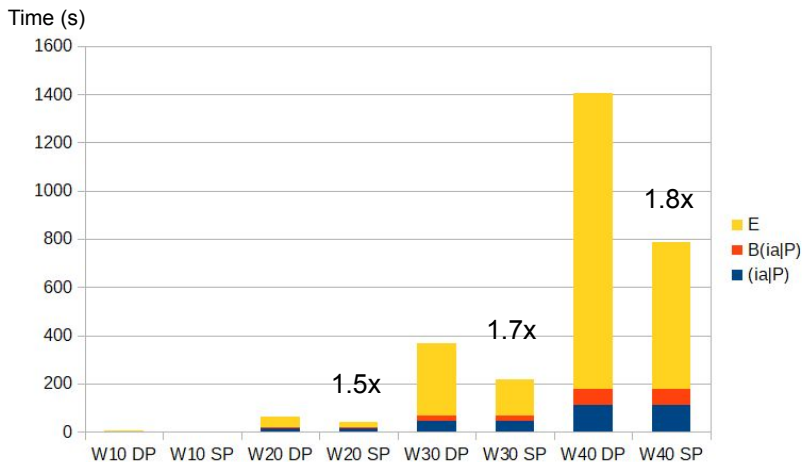# Evaluation of RI-MP2 correlation energy using mixed precision arithmetic

$$E = \sum_{ijab} \sum_{P} \frac{\left[B_{ia}^{P} B_{jb}^{P} - B_{ib}^{P} B_{ja}^{P} \right]^2}{(e_i + e_j) - (e_a + e_b)}$$

Computational speedup due to using single-precision MM for B*B contractions

Absolute error in final RI-MP2 energy due to reduced precision. Values below 10^{-6} are acceptable.

$f(x) = 1.57E\text{-}09\ x + 1.44E\text{-}08$