

Supplementary material to VFFVA: dynamic load
balancing enables large-scale flux variability analysis

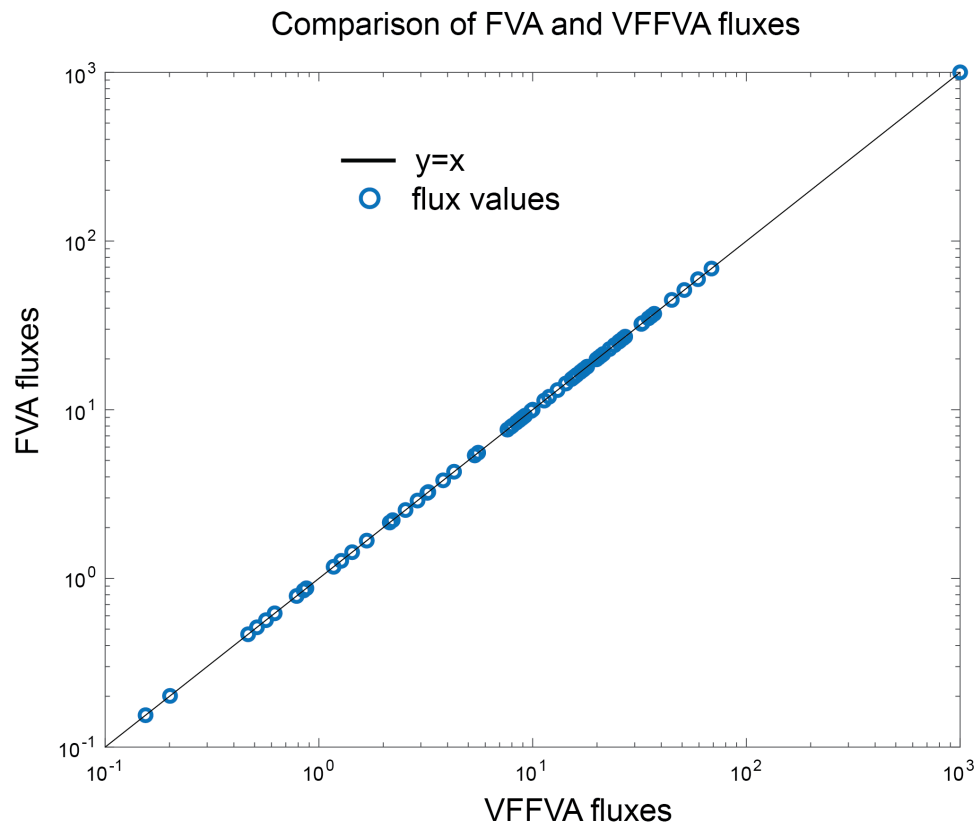


Figure S1: Comparison of VFFVA and FVA flux results in double precision using Ecoli_core metabolic model. The largest difference between the flux values is equal to $4.9314 * 10^{-7}$.

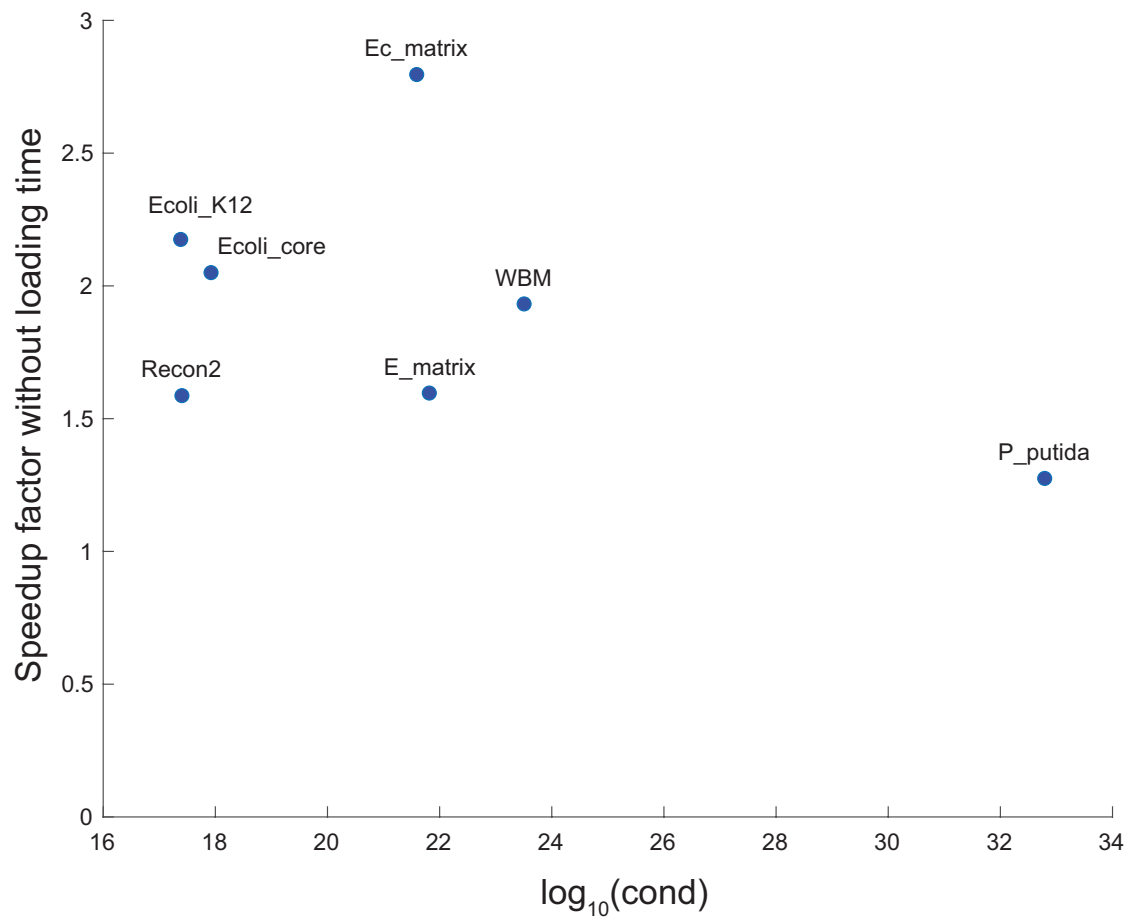


Figure S2: Absence of the effect of model complexity on VFFVA speedup over FFVA. The speedup of VFFVA over FFVA using 16 cores is represented as a function of model complexity expressed as the \log_{10} of the condition number of the stoichiometric matrix S of the selected models. Only the fraction of speedup that is due to dynamic load balancing, i.e., excluding loading time, is considered in this analysis. $r = -0.45$, p -value = 0.3.