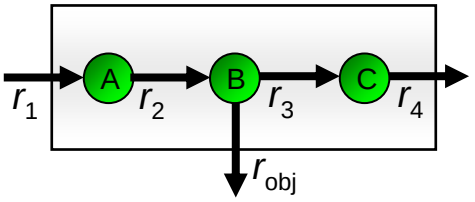
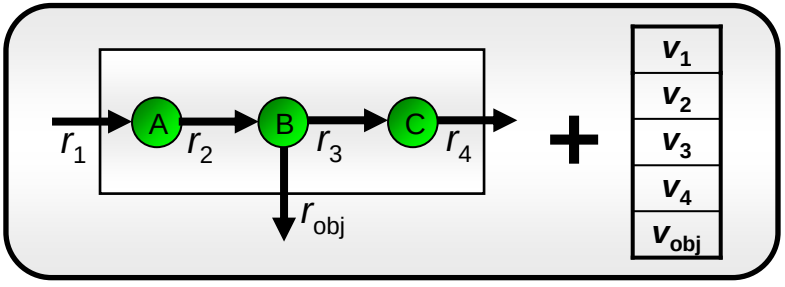
a. Data Preparation

1. Generate a stoichiometric network reconstruction.

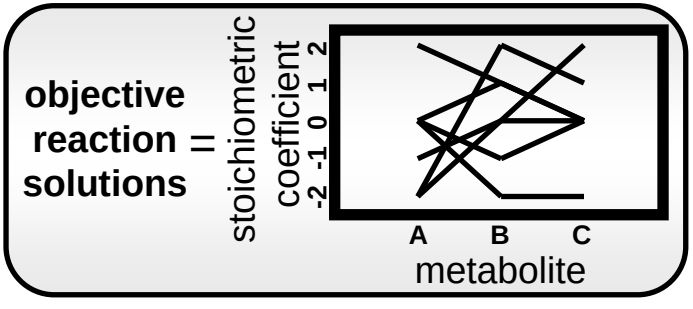


2. Obtain a flux distribution for the reaction network experimentally (e.g., isotopomer measurements).



b. BOSS Framework

3. Vary initial guesses for stoichiometric coefficients over many restarts, using a single-level optimization algorithm to generate one objective reaction prediction per restart.



4. Cluster resulting objectives, and pick most populous cluster as consensus objective.