Shuffling optimization formulation

# Variables and parameters

* i, j, k refer respectively to the assembly (total ), assembly location (total ) and cycle indices (total )
* : input fluxes from serpent calculation for each location
* : batch index for each assembly location
* : shuffling scheme which determines for each cycle the batch in which are the assemblies
* : assemblies’ allocation to locations (variable)
* : maximum fluence difference between assemblies for each cycle (variable)

🡺 Number of variables:

# Cost function

# Constraints

## Inequalities

1. Calculate the maximum fluence difference between assemblies for each cycle:
2. Zero or one assembly per location:

## Equalities

1. Accumulated fluence calculation:
2. Each assembly has to go in one location:
3. If a location is in the wrong batch for a given cycle, don’t select it: