

Alternative modelling approaches

cellular automata models - hydrodynamic applications

- Rule based deterministic model
- Each cell evolves through time according to very simple rules based on contents of neighbouring cells

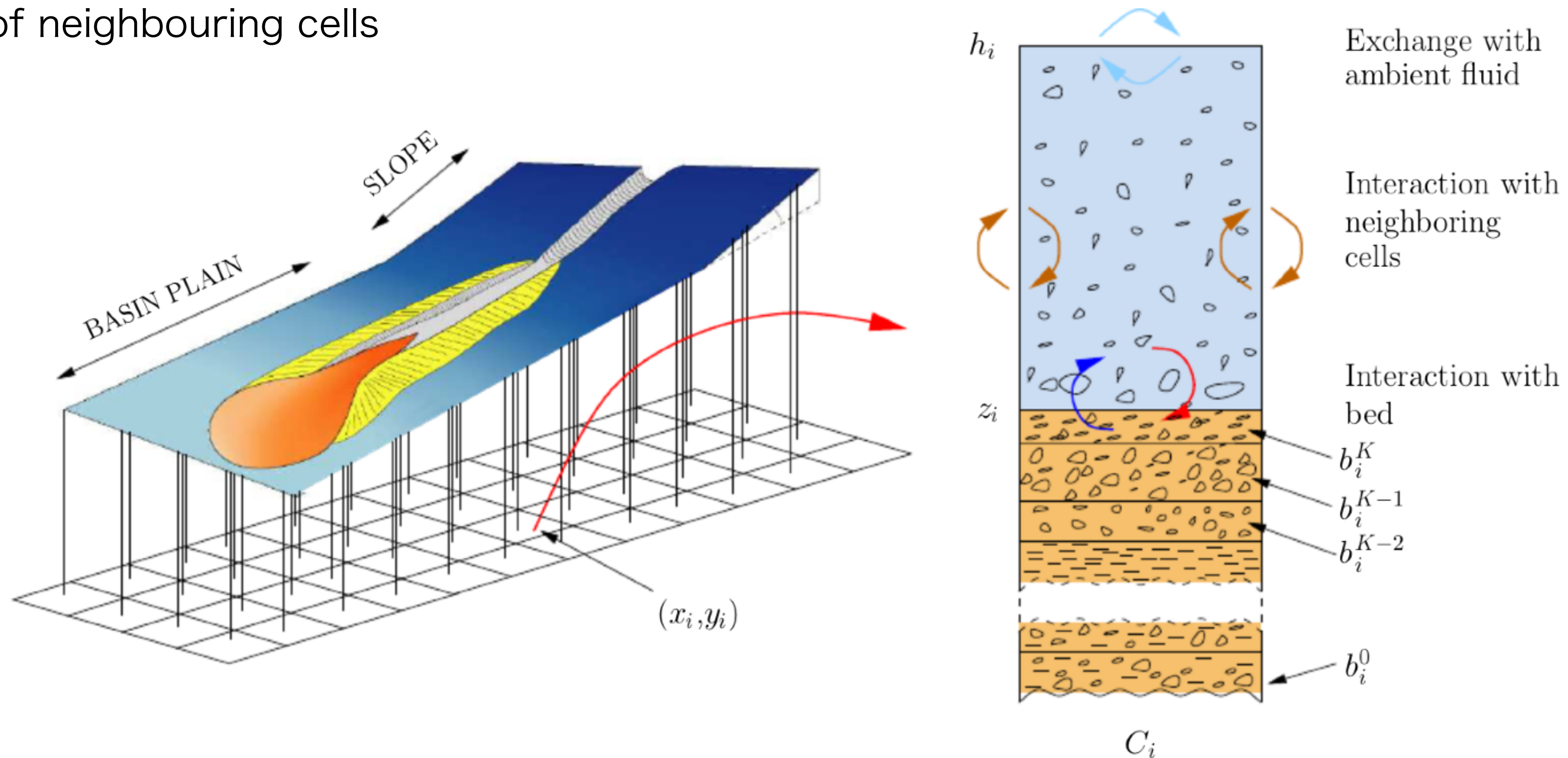
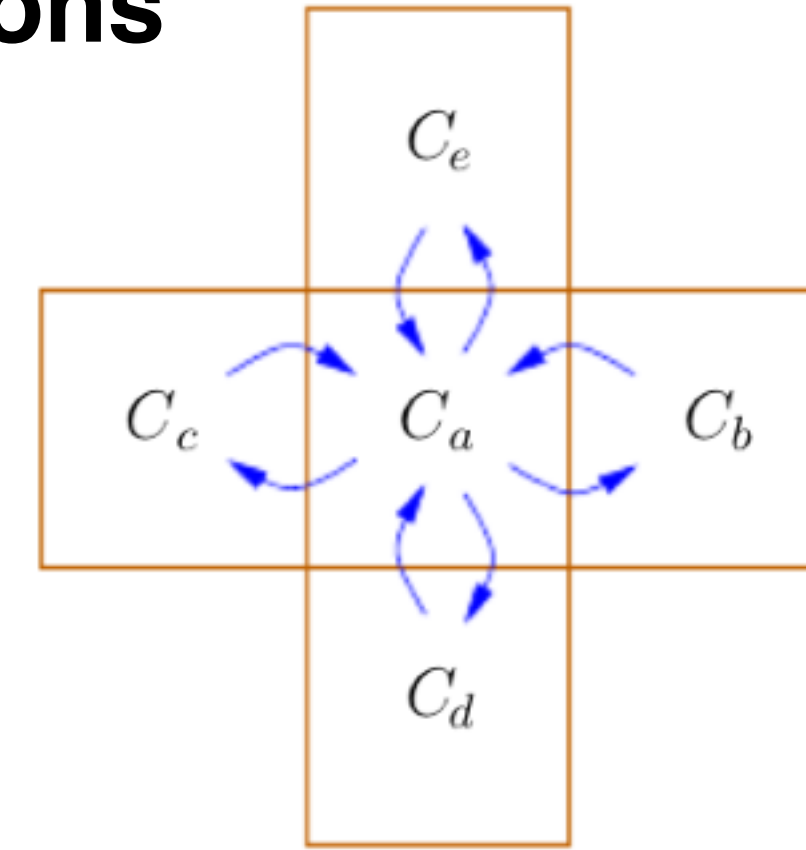


FIG. 1 – Discretization domain and rules applied to each cell.

Alternative modelling approaches

cellular automata models - hydrodynamic applications

- Rule based deterministic model
- Each cell evolves through time according to very simple rules based on contents of neighbouring cells



Neighboring cells transfer

Collapse of the transferred column

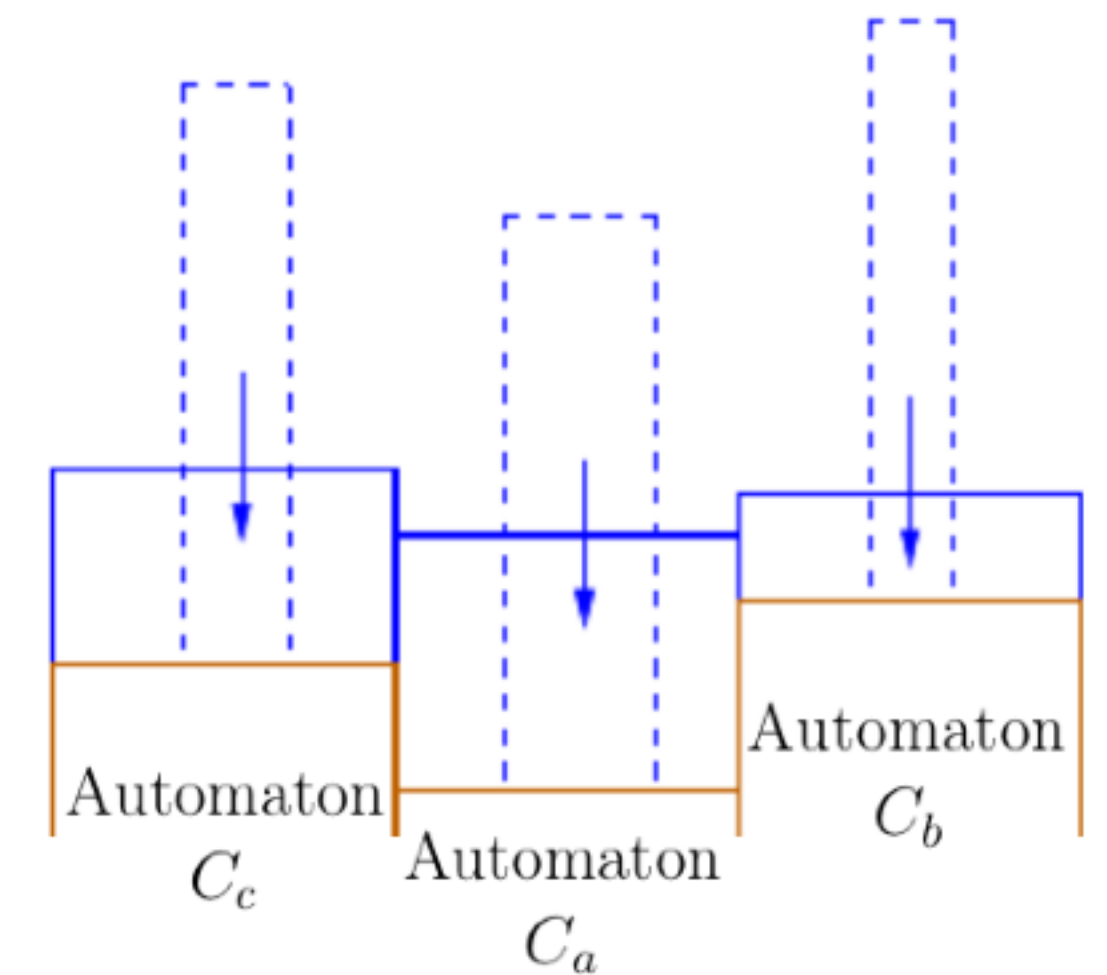
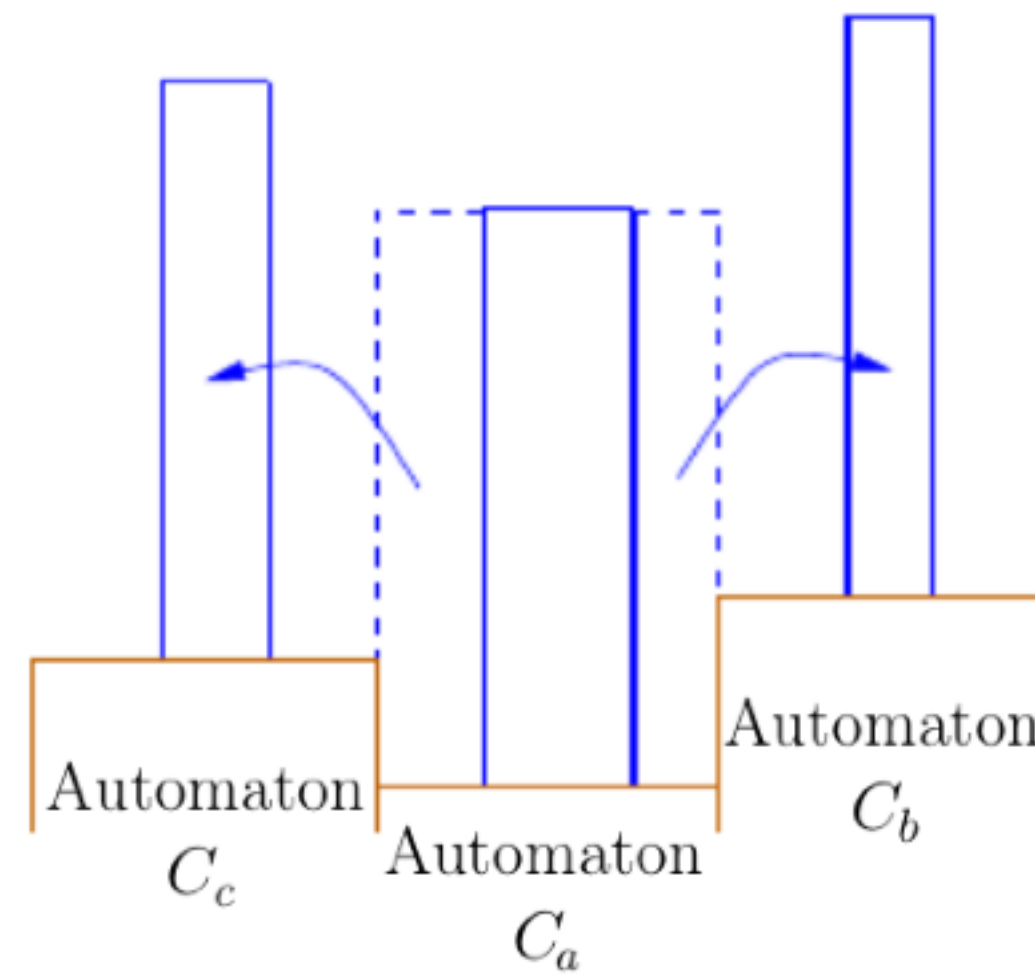
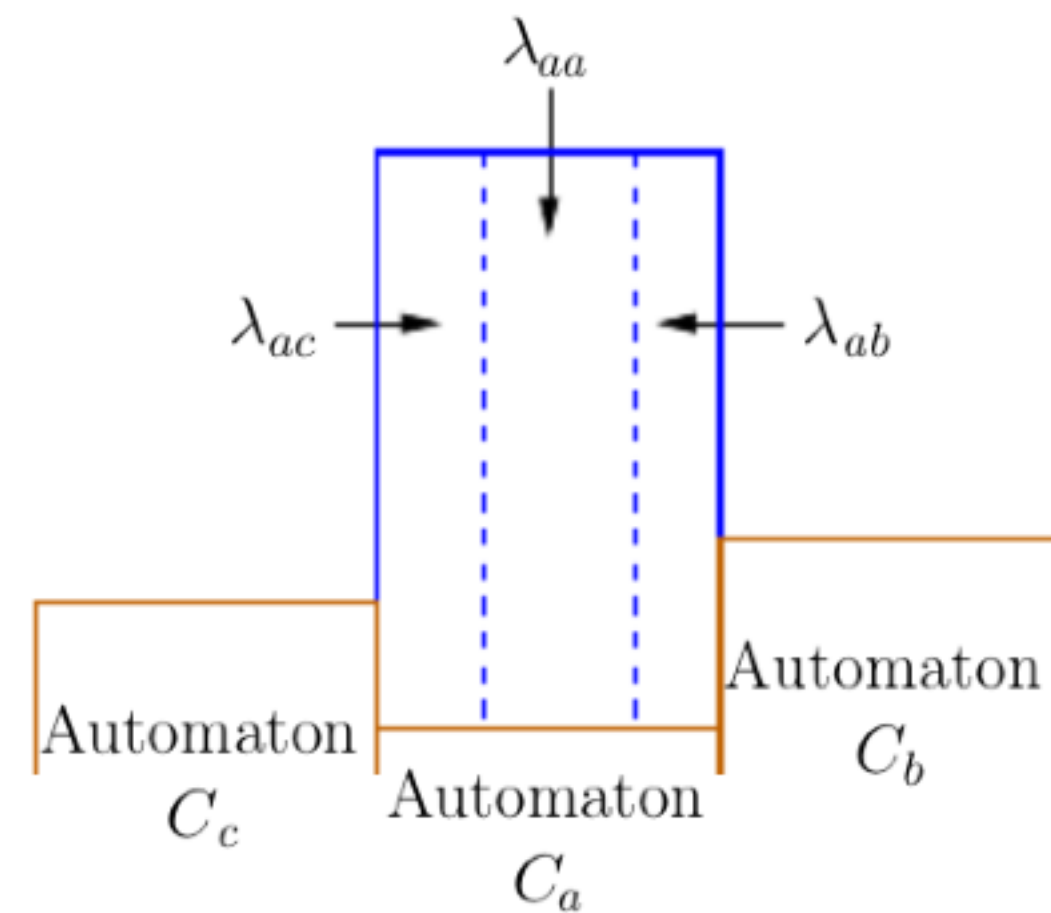


FIG. 2 – Matter and energy exchange between neighbors. Distribution of λ_{ij} that minimizes the work of gravity.