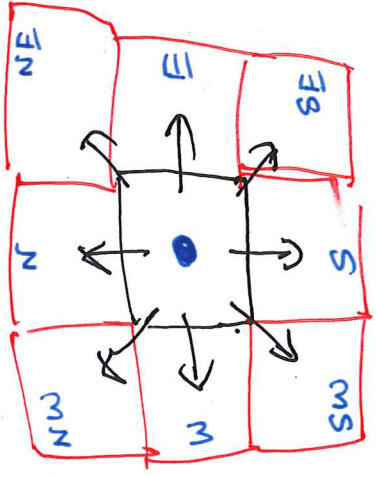
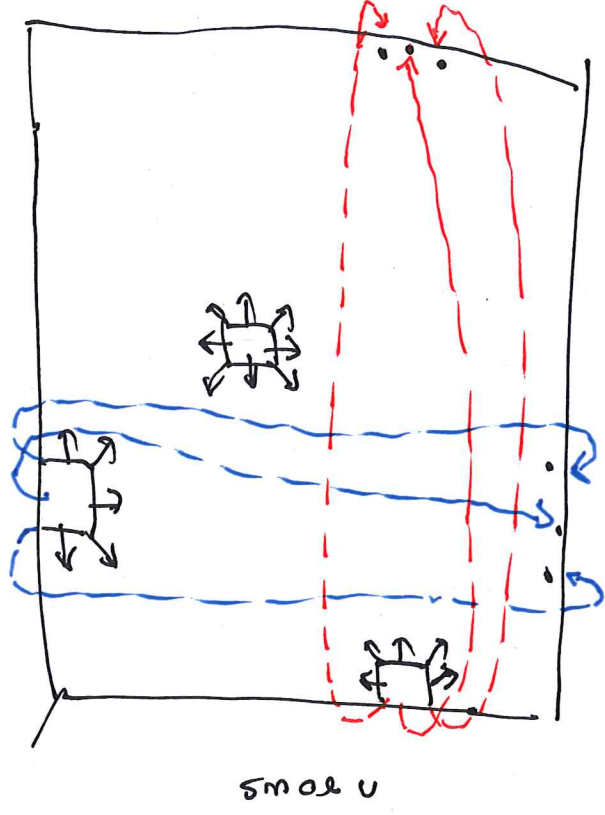


a) A cell:

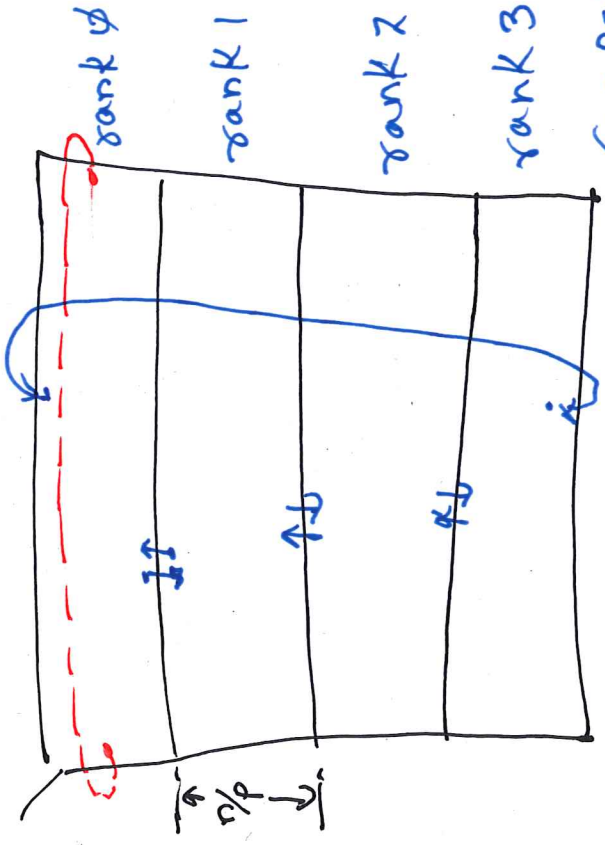


\vec{N} \vec{E}

b) Matrix Structure ~~(A)~~



c) Matrix block decomposition



row-wise block decomposition
(e.g. $P=4$)

\updownarrow communication to ensure dependent cells are available
 \dashrightarrow cell dependency to be available without needing communication.