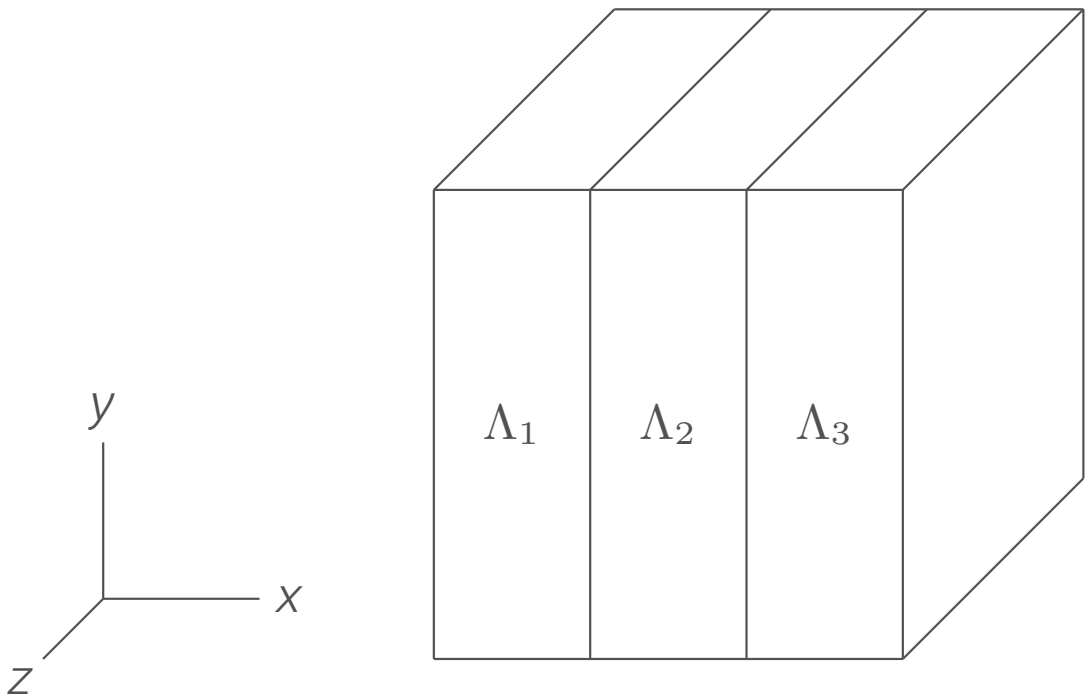
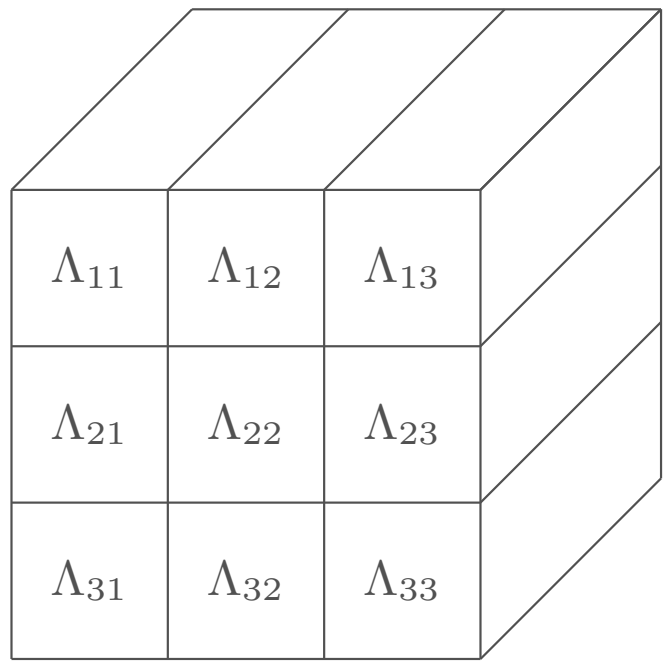
Parallelization in $\mathcal{C}$osmo$\mathcal{L}$attice

Parallelization in one direction



Parallelization in two directions



Parallelization in $\mathcal{C}$osmo$\mathcal{L}$attice

N: # lattice points, n_p =# of processes

Parallelization $1D$: $N = m \cdot n_p, \quad m \in \mathbb{N}$

Parallelization $2D$: $N = m_1 \cdot n_p, \quad m_1 \in \mathbb{N}$

$= m_2 \cdot n_p, \quad m_2 \in \mathbb{N}$

Example: $N = 50$

$n_p = 2$	$n_p = 2, (2,1)$	$n_p = 20, (10,2)$	$n_p = 125, (25,5)$
$n_p = 5$	$n_p = 4, (2,2)$	$n_p = 25, (5,5)$	$n_p = 250, (25,10)$
$n_p = 10$	$n_p = 5, (5,1)$	$n_p = 50, (10,5)$	$n_p = 625, (25,25)$
$n_p = 25$	$n_p = 10, (5,2)$	$n_p = 100, (10,10)$	

Thanks!