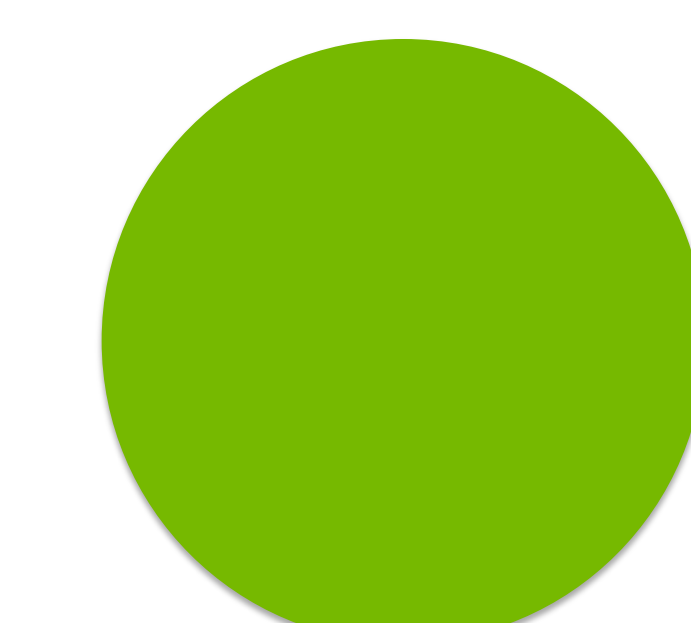


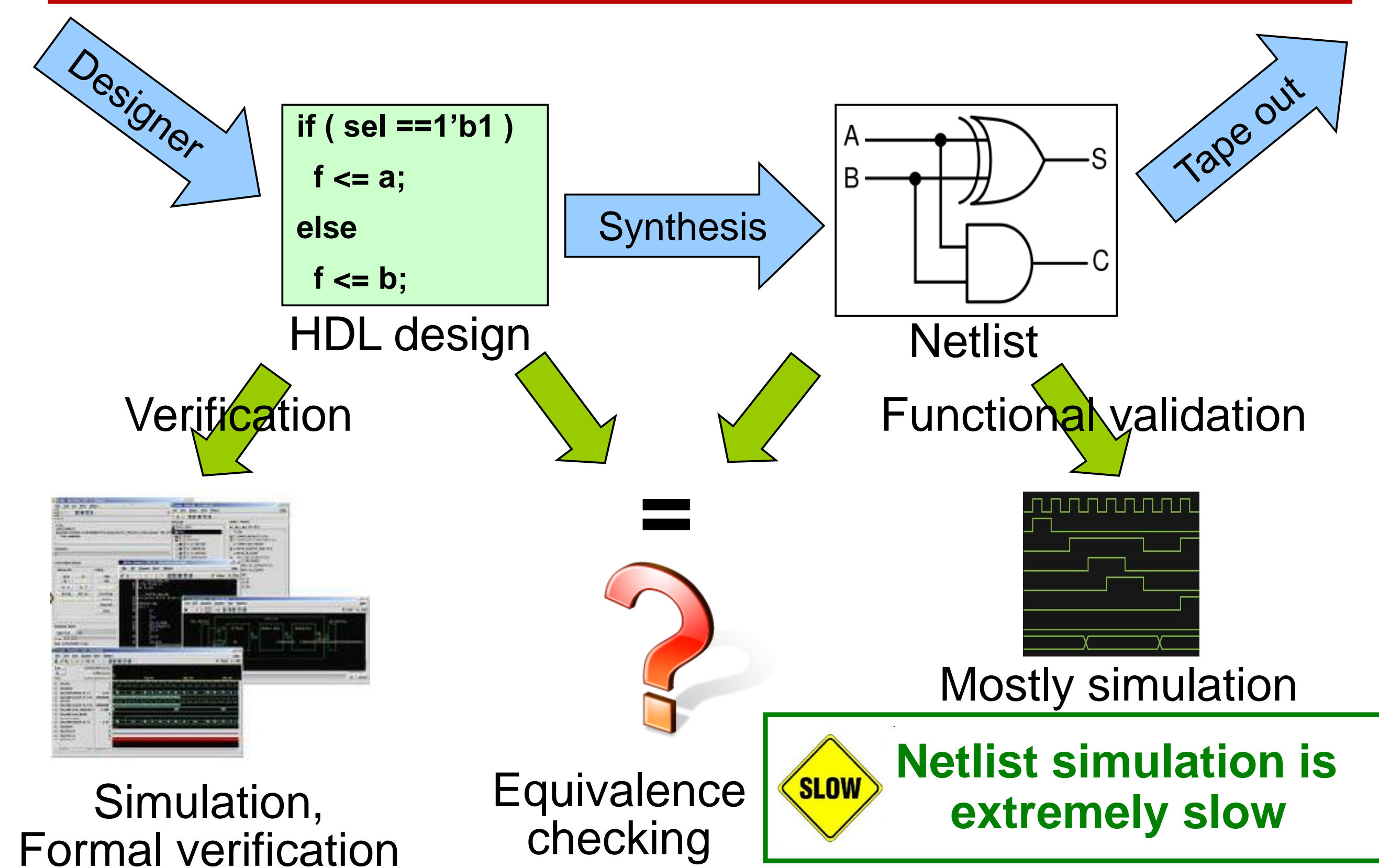


# Gate-level Simulation with GP-GPUs

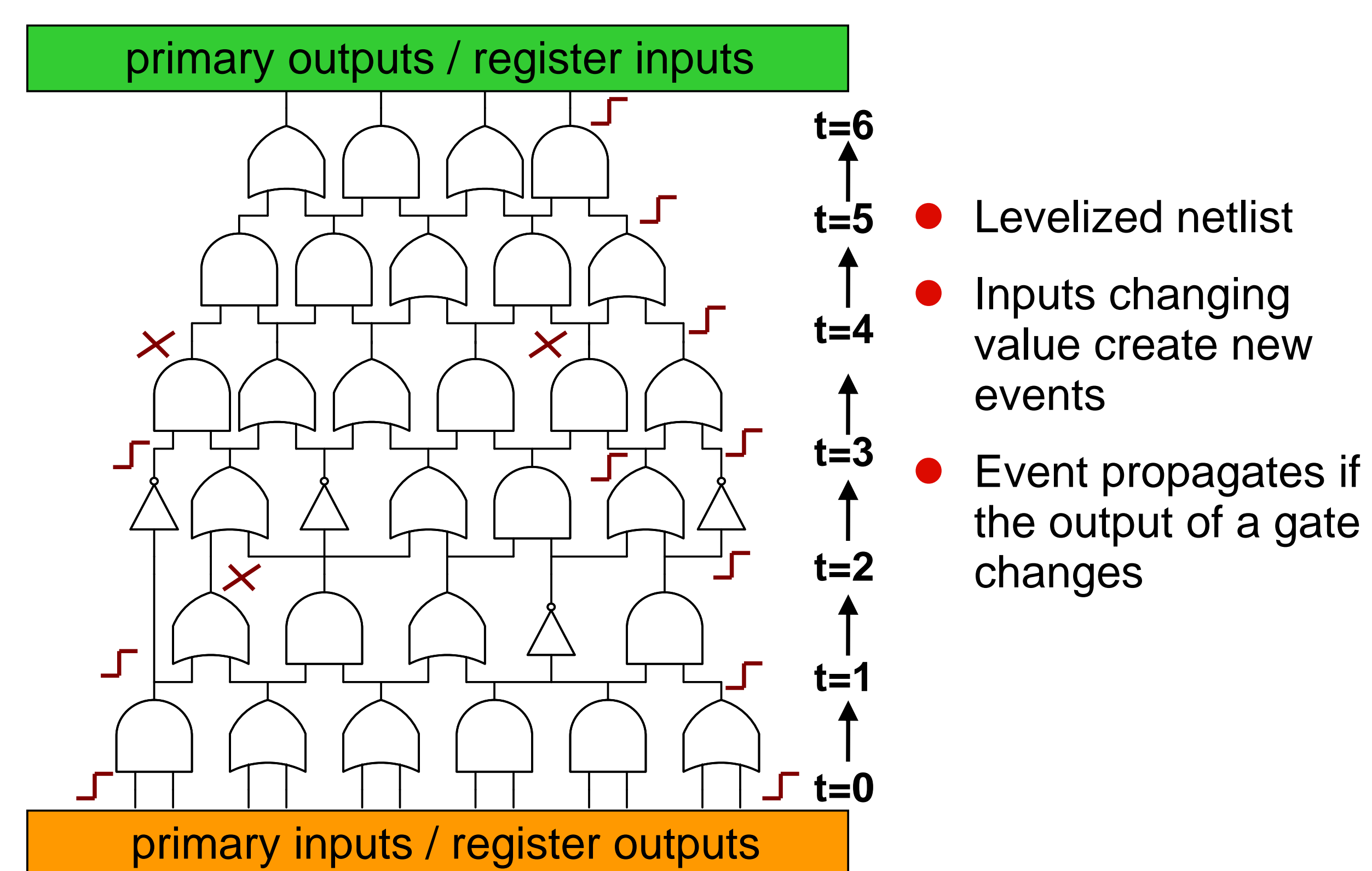
Debapriya Chatterjee, Andrew DeOrio and Valeria Bertacco  
The University of Michigan, Ann Arbor



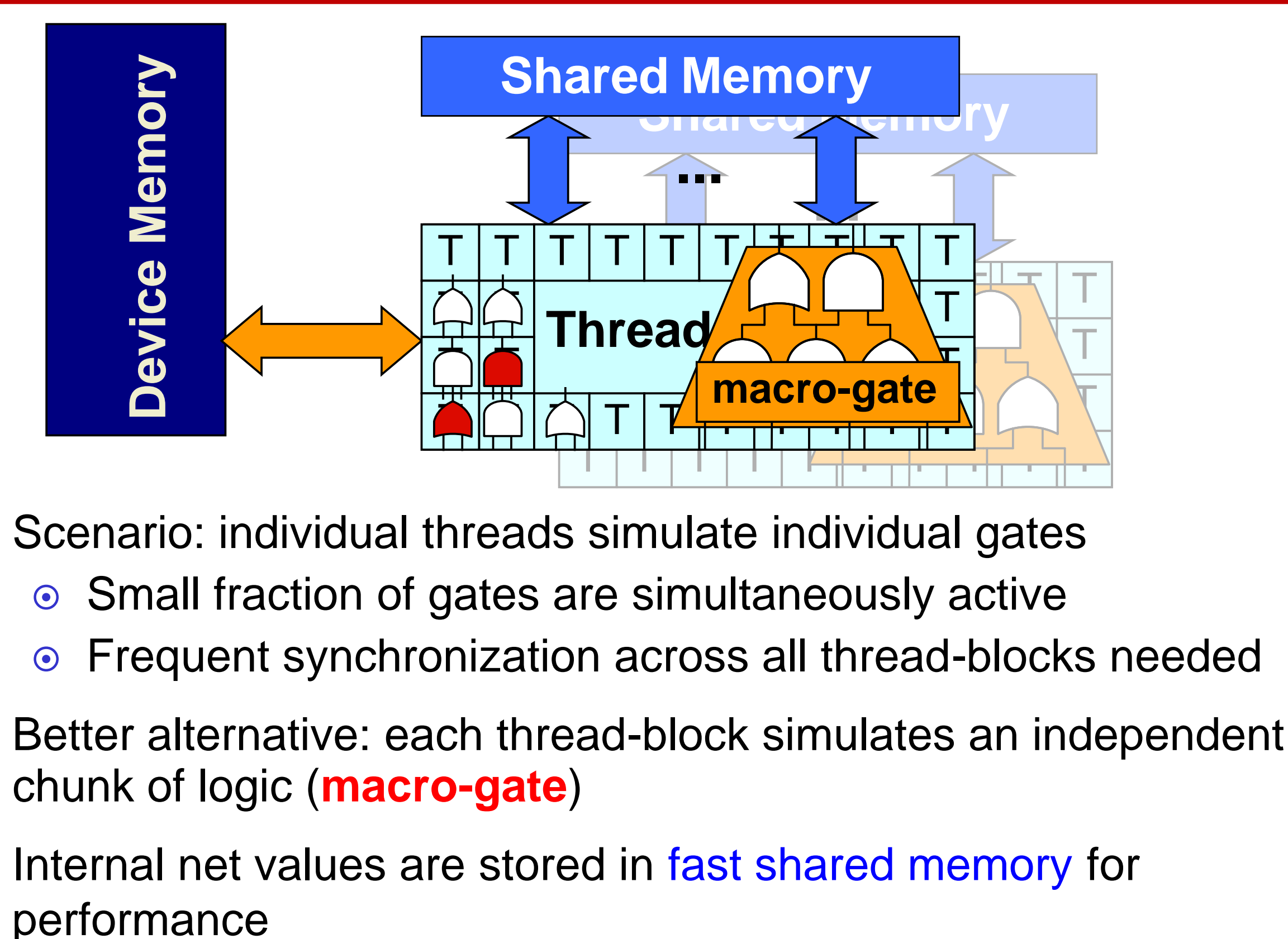
## Design flow: role of simulation



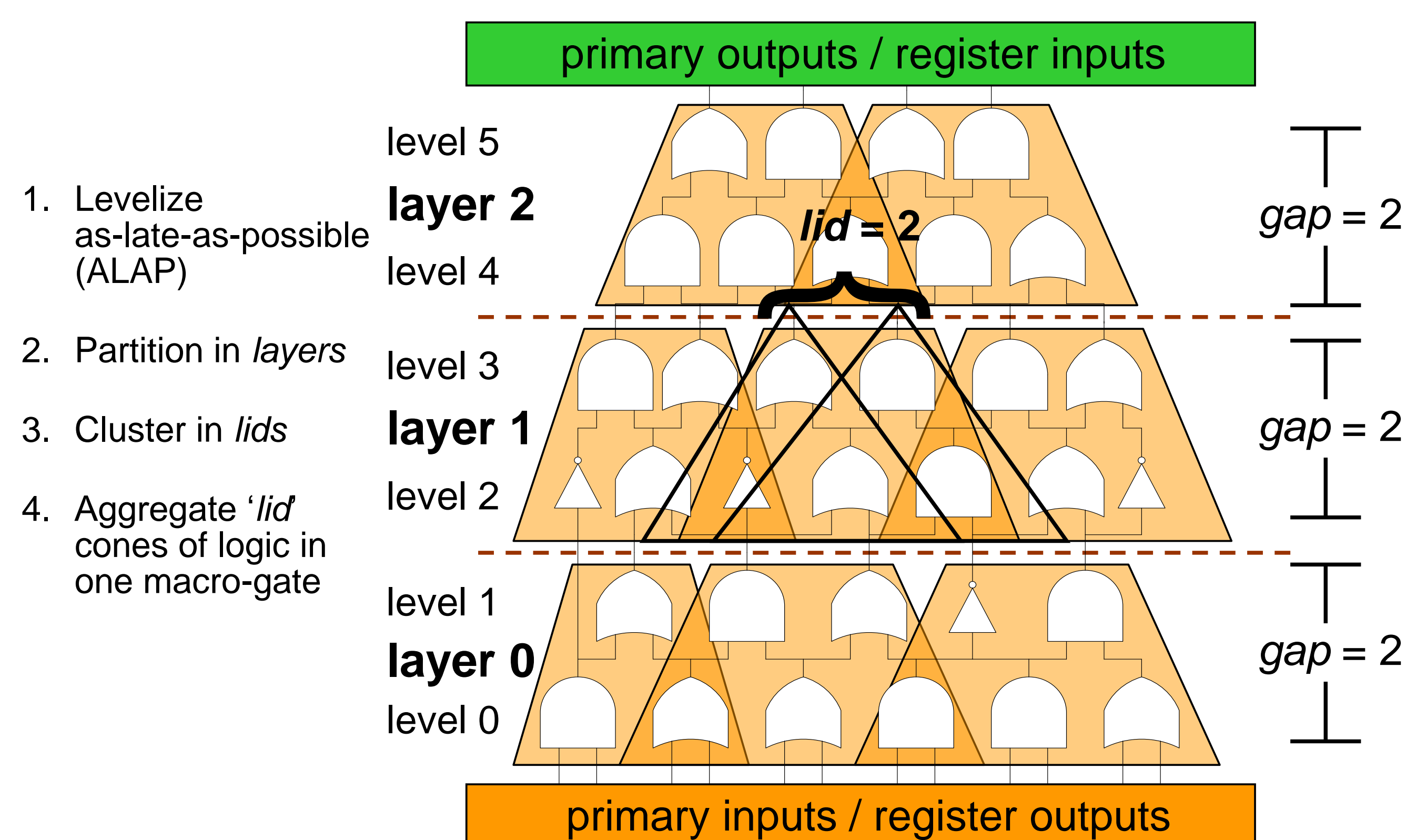
## Event-driven simulation



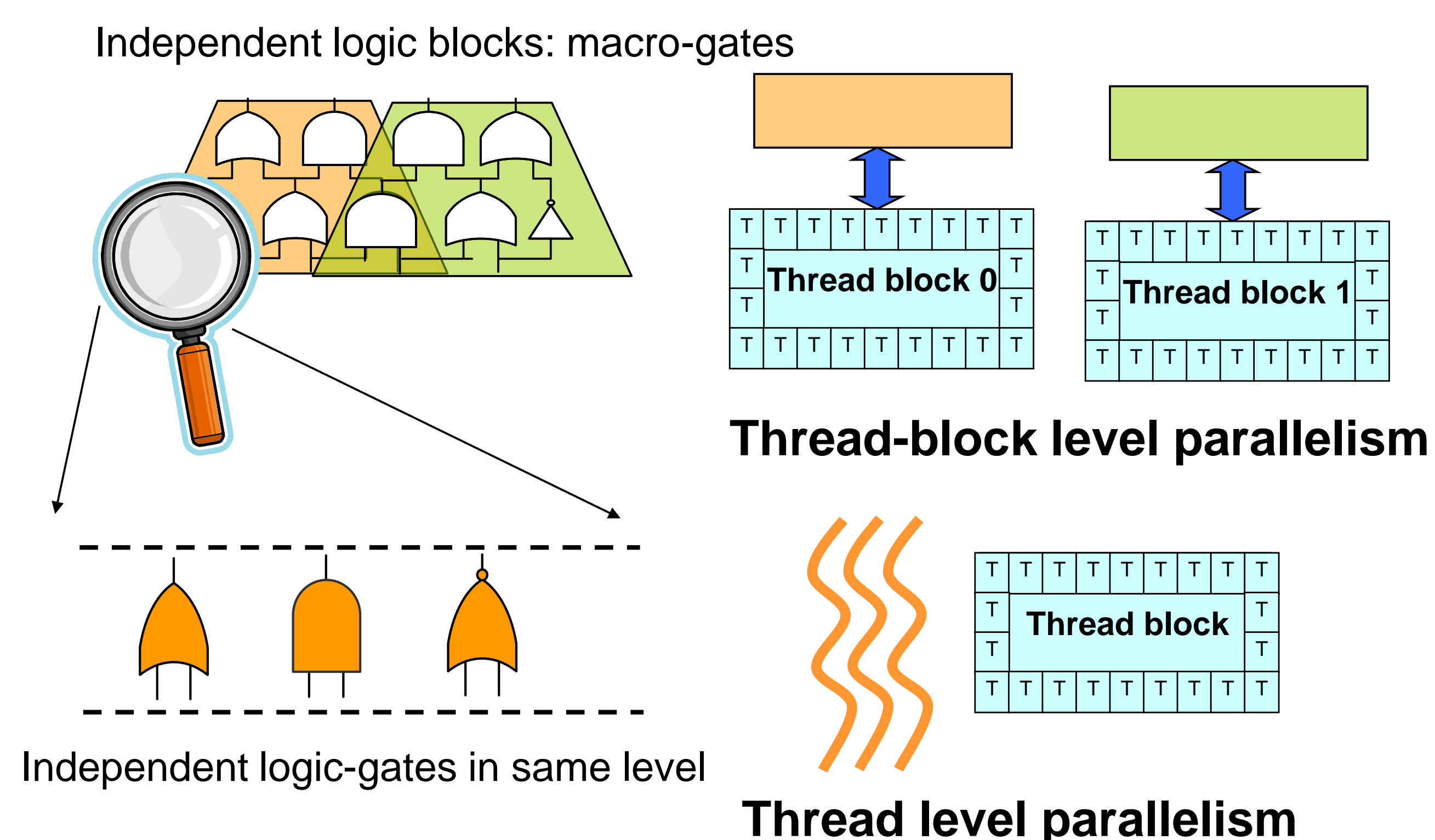
## Event-driven: GP-GPU perspective



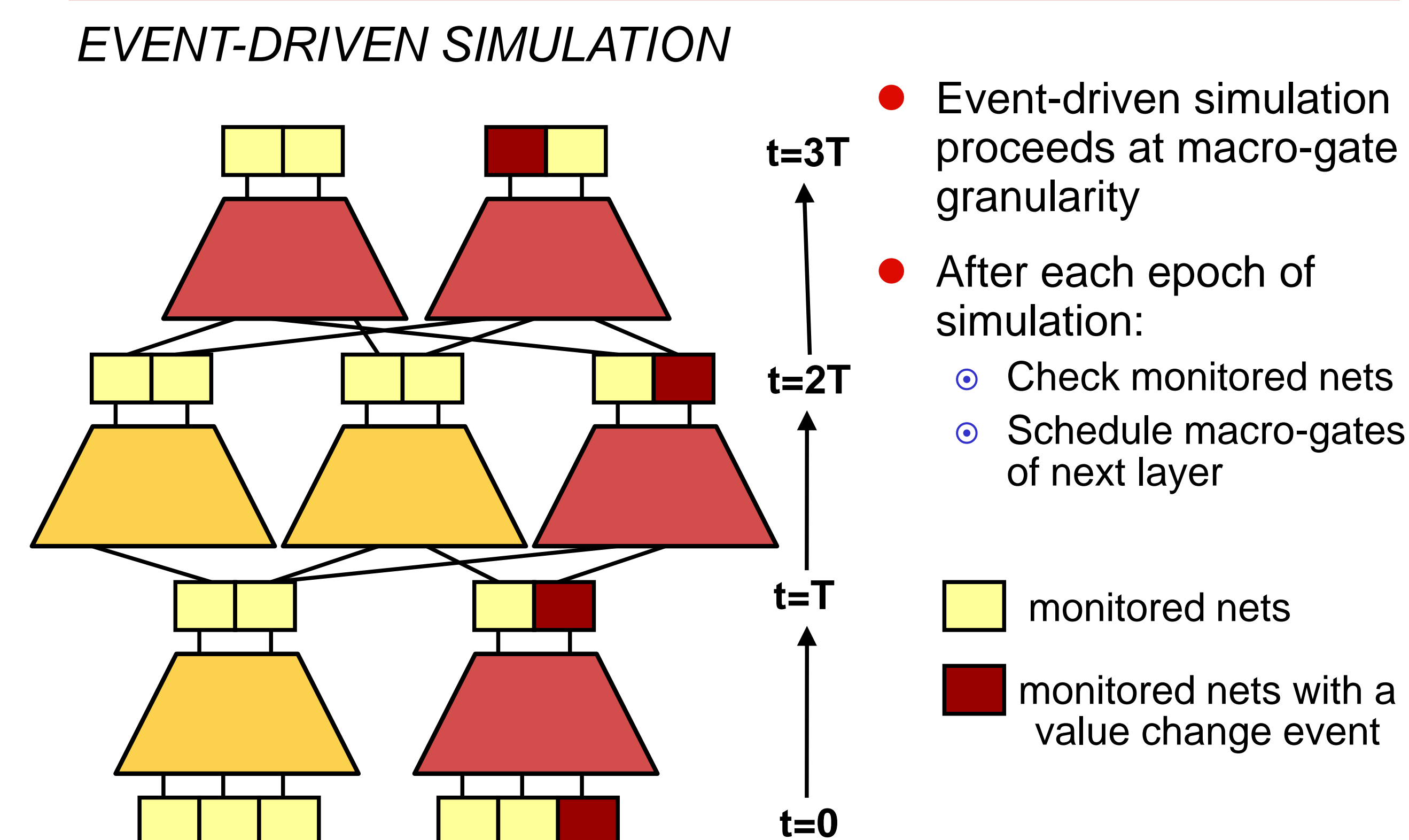
## How do we carve macro-gates?



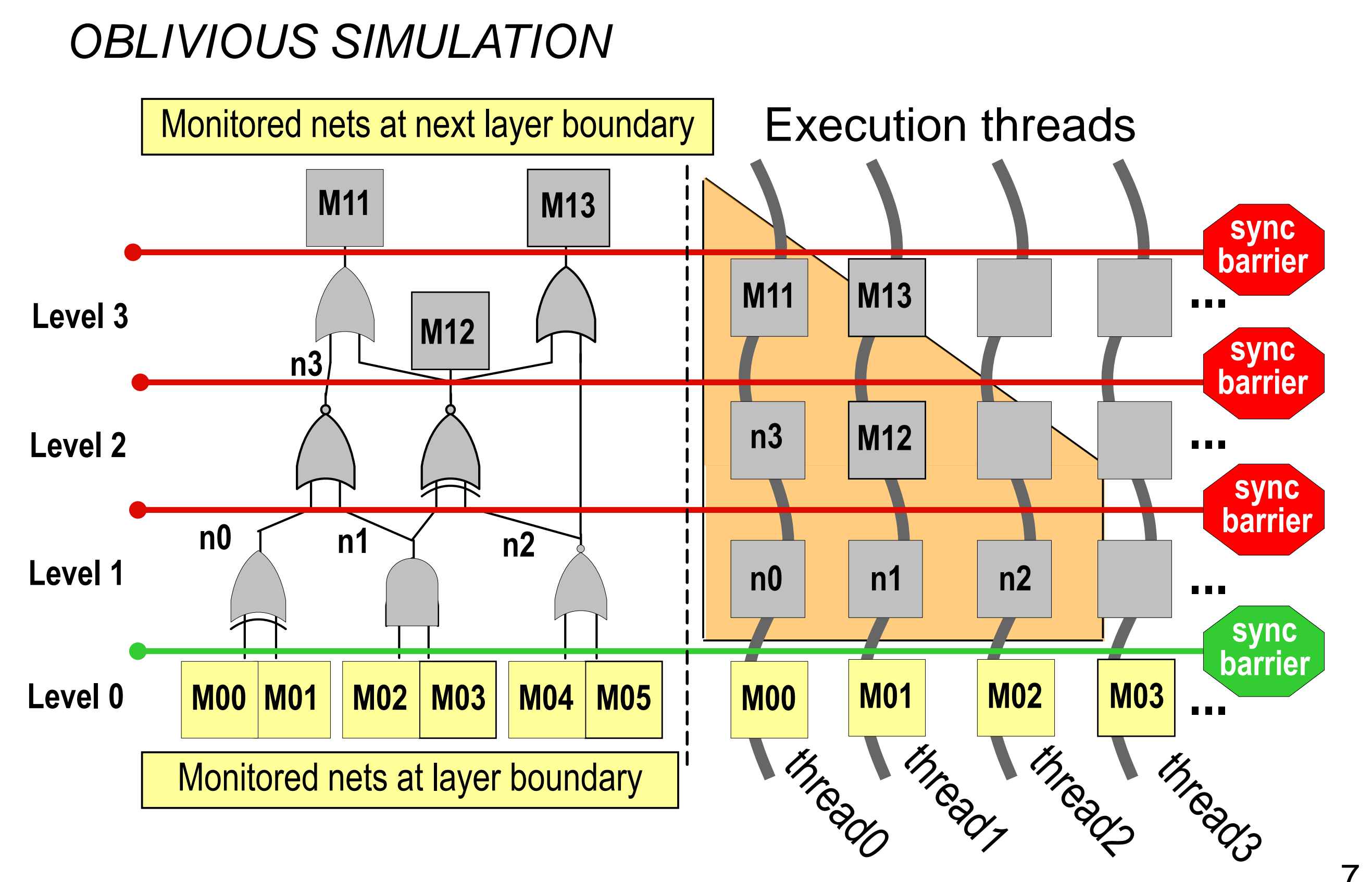
## Parallelism: GP-GPU perspective



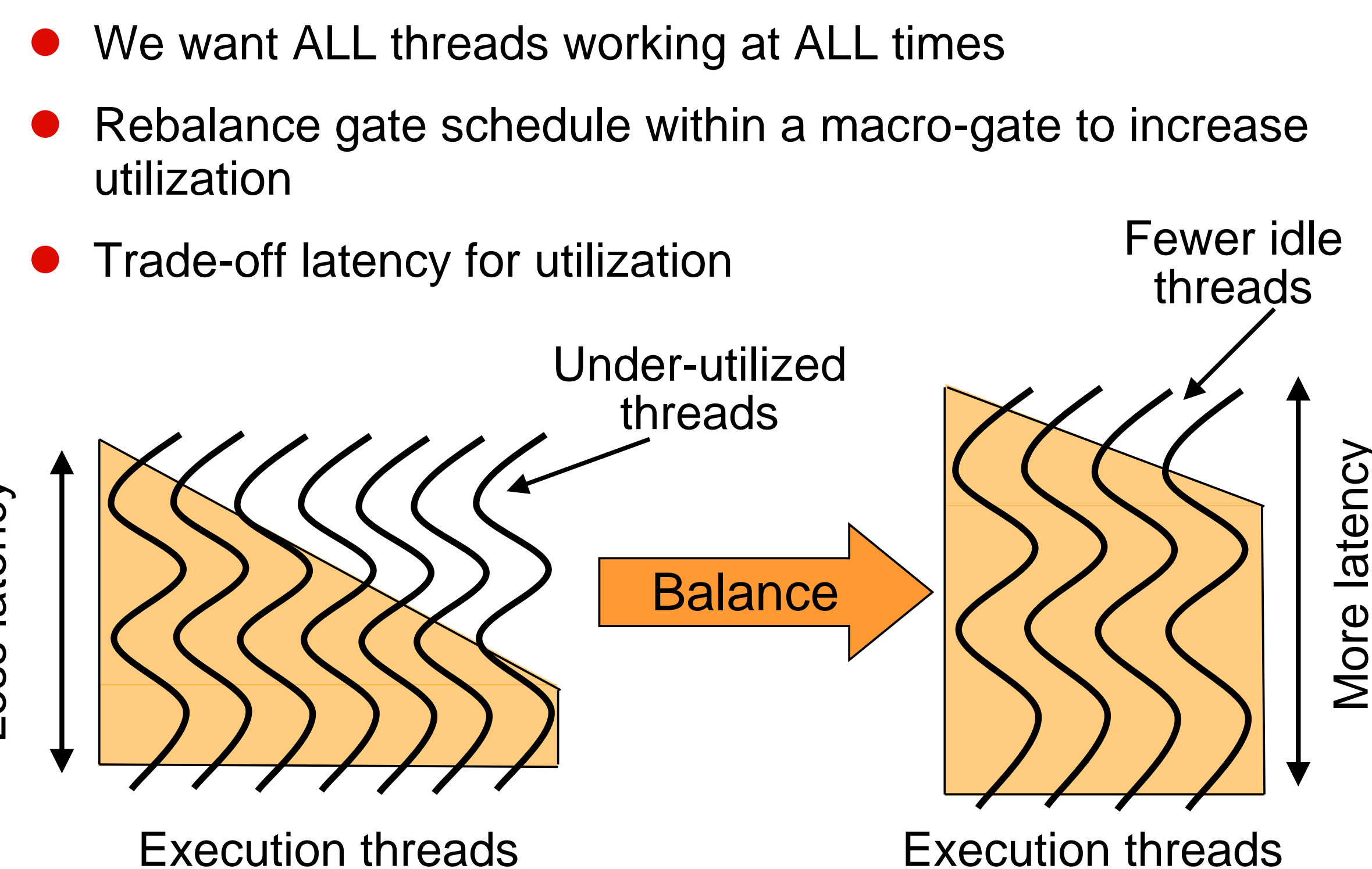
## Event-driven simulation: mechanism



## Simulation within a thread-block



## Macro-gate balancing



## Performance vs. commercial simulator

