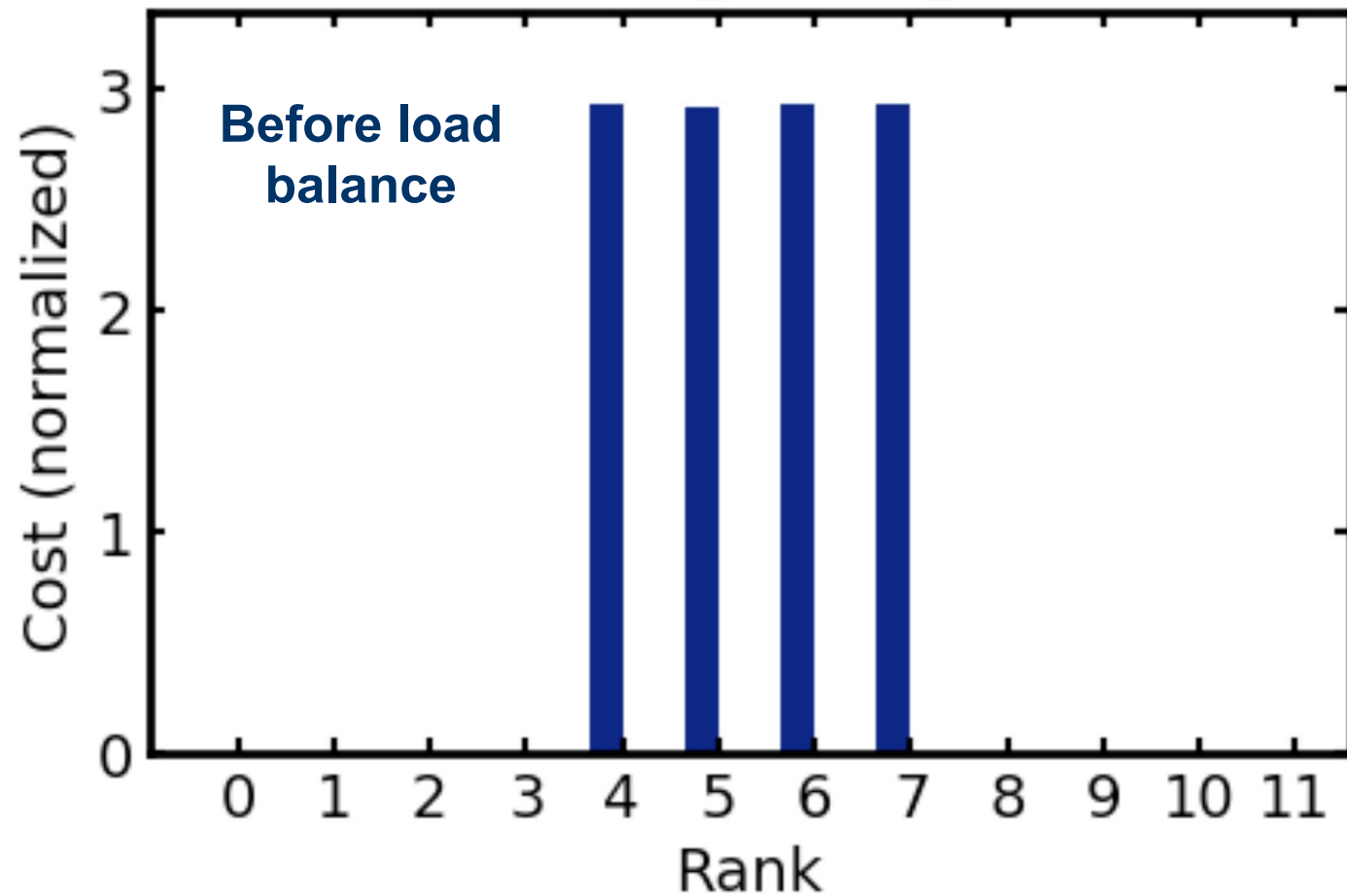# Used CUPTI Callback timing as input to load balancing modules for a WarpX test problem

- Plot to the right shows time evolution of 'cost' per GPU
- Load balance every 25 steps (for this case)
- Cost initially imbalanced (ranks, 4 – 7 do most of the work)
- Work is more evenly distributed after step 25

Cost vs. Rank (load balance based on GPU particle push)
step = 1; load_balance_int = 25;

Before load balance

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Cost vs. Rank (load balance based on GPU particle push)
step = 51; load_balance_int = 25;

After load balance