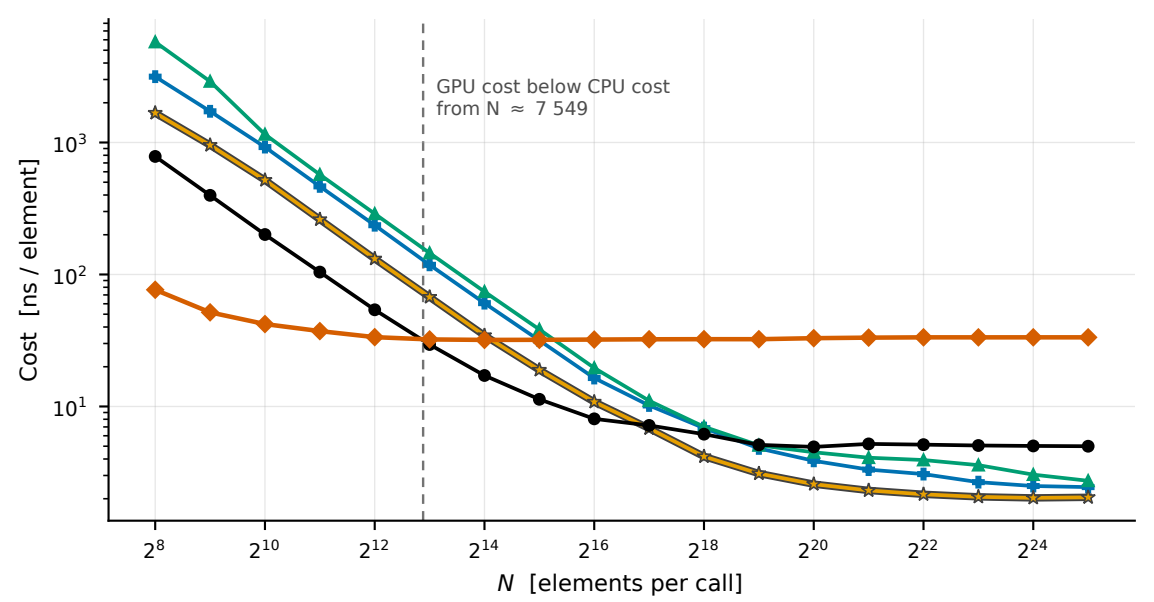
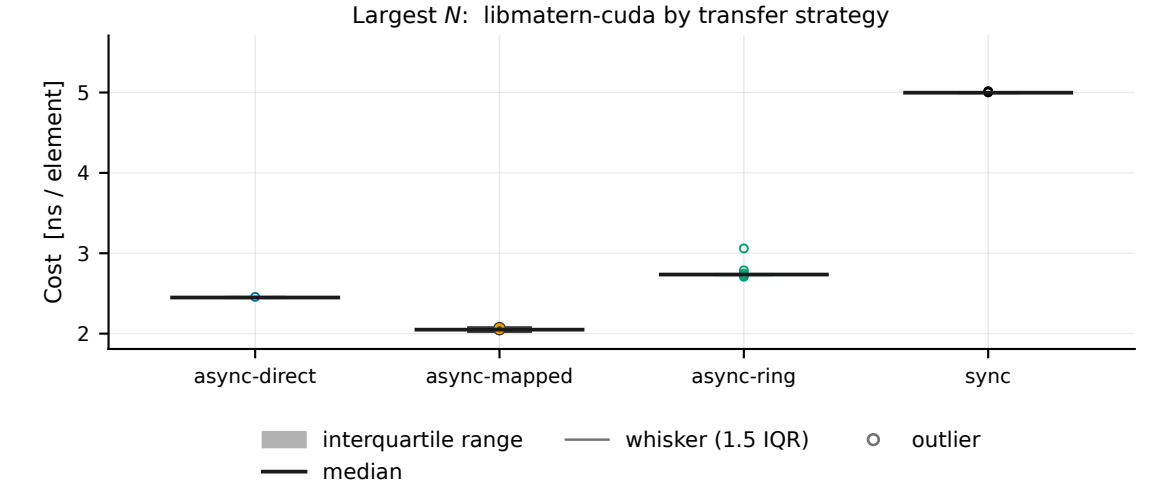

GPU cost below CPU cost
from N ≈ 7 549
Cost [ns / element]
10^3
10^2
10^1
2^8
2^{10}
2^{12}
2^{14}
2^{16}
2^{18}
2^{20}
2^{22}
2^{24}
N [elements per call]
async-direct
async-mapped
async-ring
sync
CPU AVX-512 (same machine)


Largest N: libmatern-cuda by transfer strategy
Cost [ns / element]
5
4
3
2
async-direct
async-mapped
async-ring
sync
interquartile range
whisker (1.5 IQR)
outlier
median