Parallelism Jeopardy

Putting it all together!

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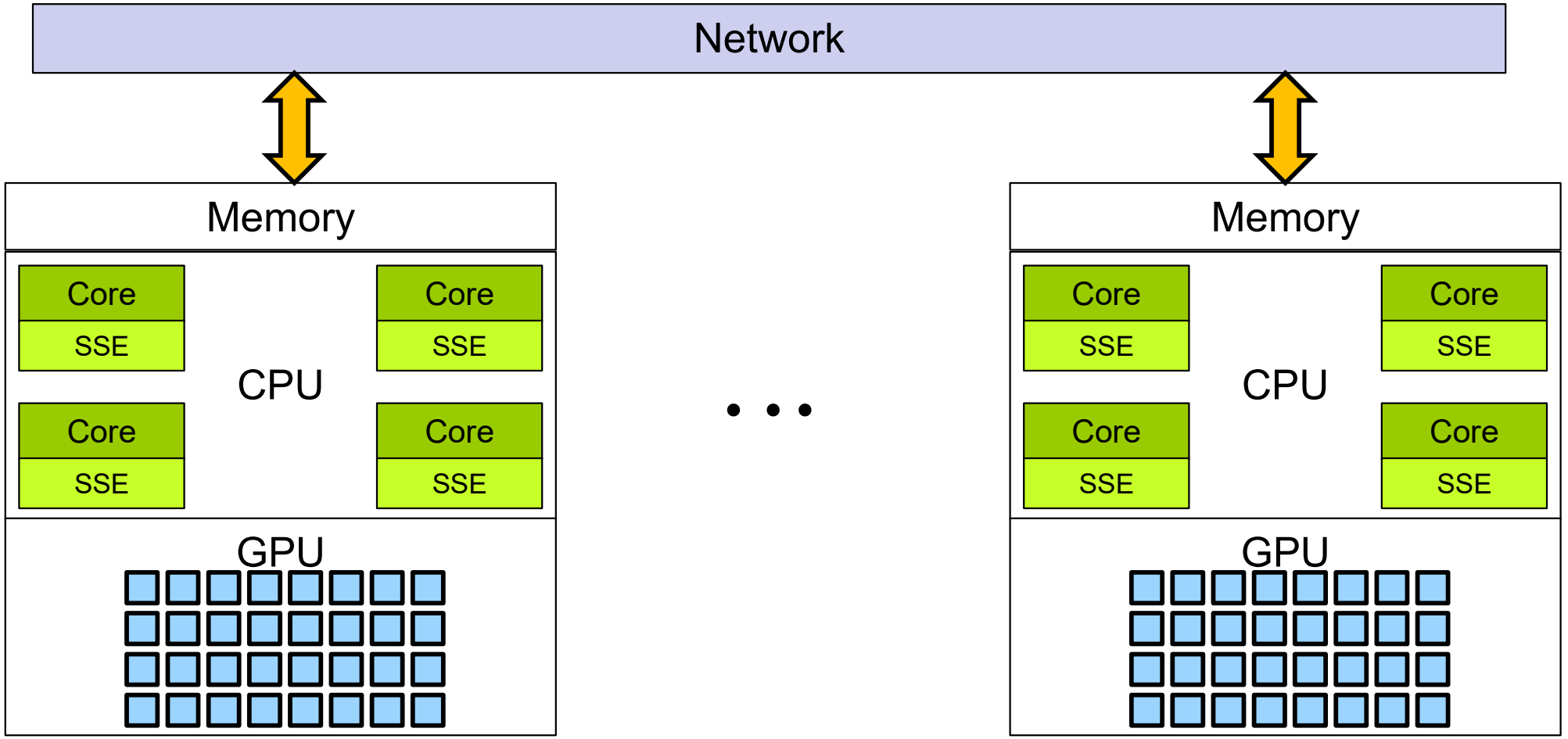
Computer Graphics

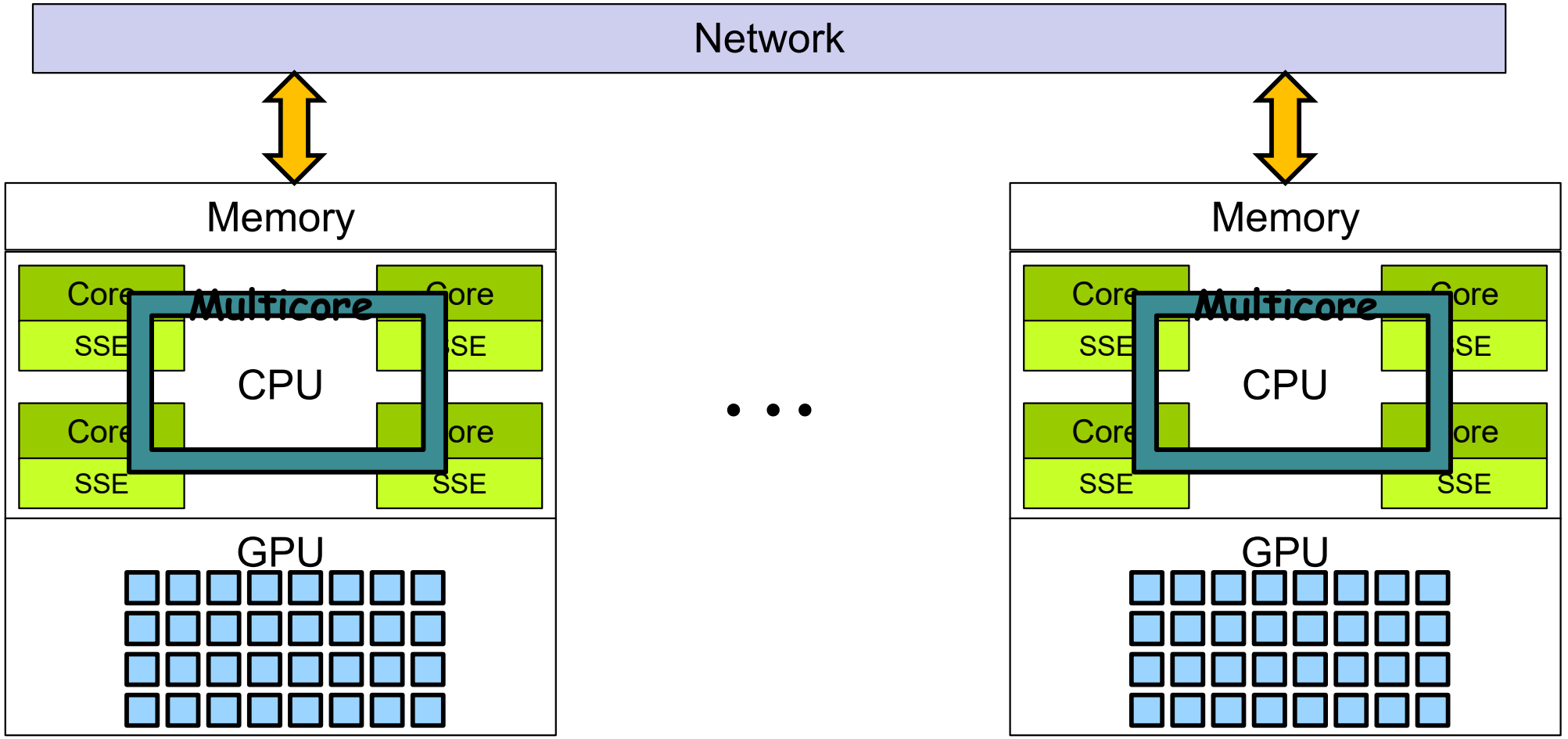
Suppose We Have This Setup



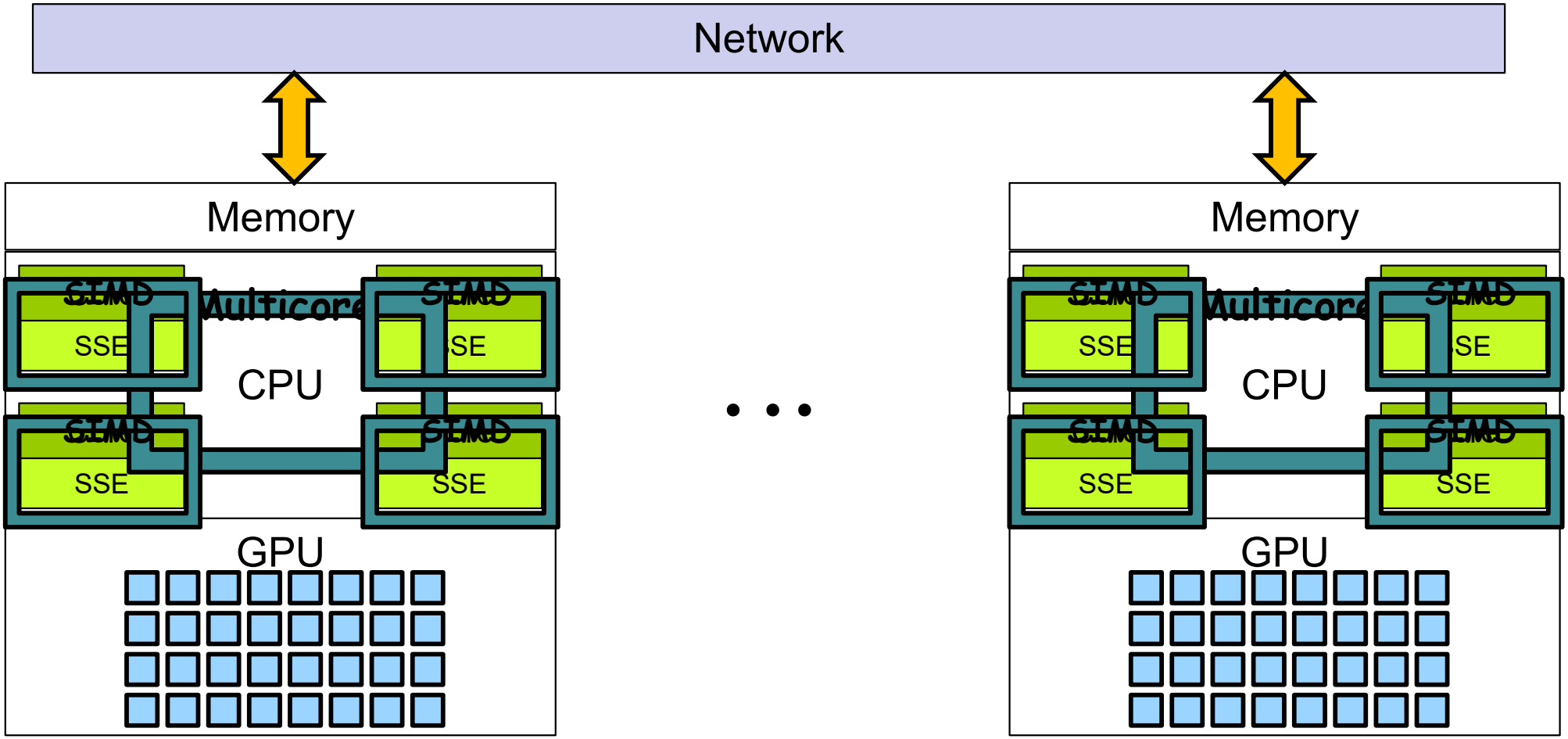
Welcome to *Parallelism Jeopardy!*

I'll take CS 475/575 for $800, Alex.

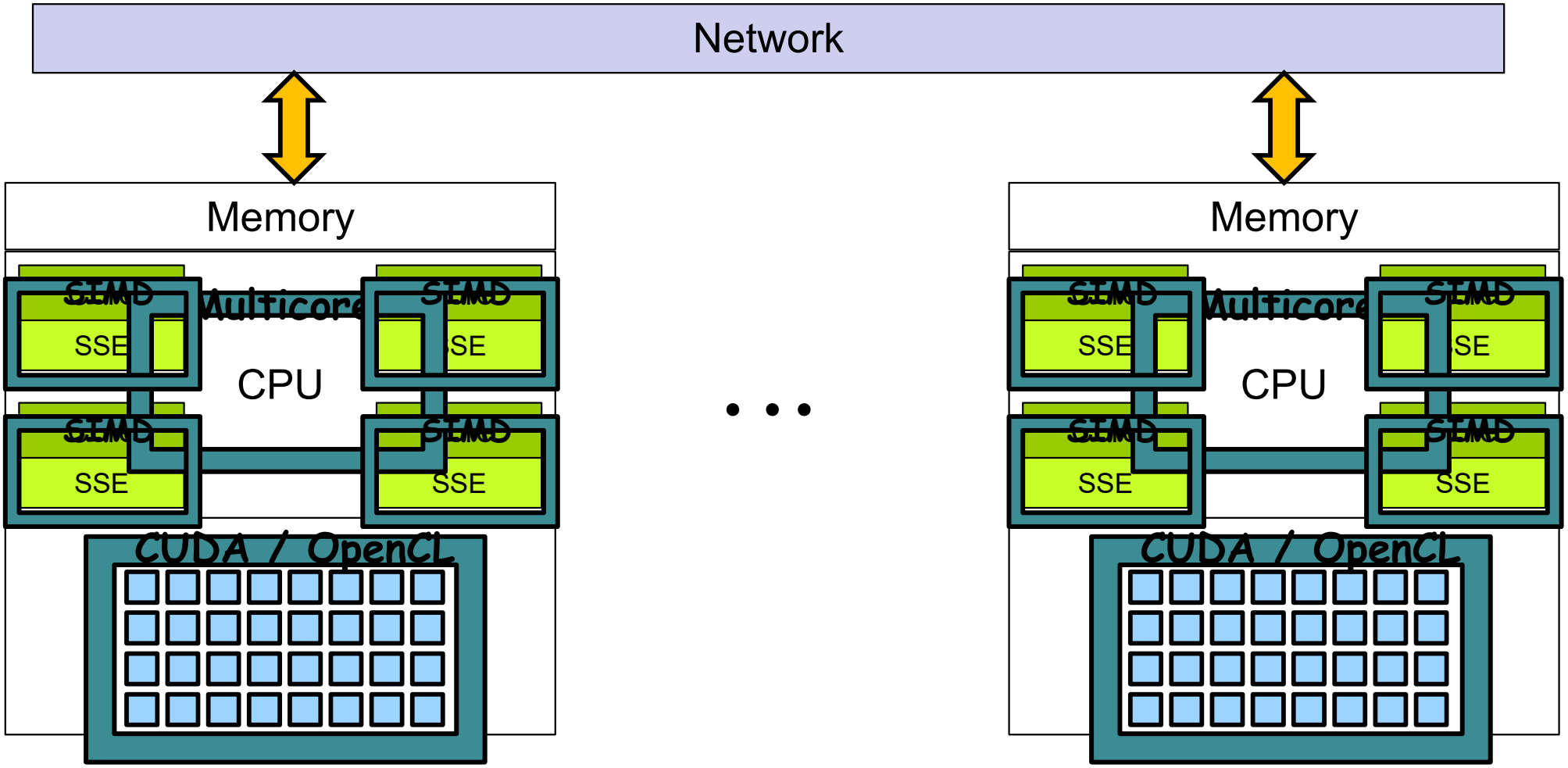
IN A MULTI-CPU DISTRIBUTED SYSTEM, THIS IS THE TOTAL NUMBER OF DIFFERENT KINDS OF PARALLELISMS THAT WE CAN COMBINE



1. Multicore OpenMP



1. Multicore OpenMP
2. CPU SIMD

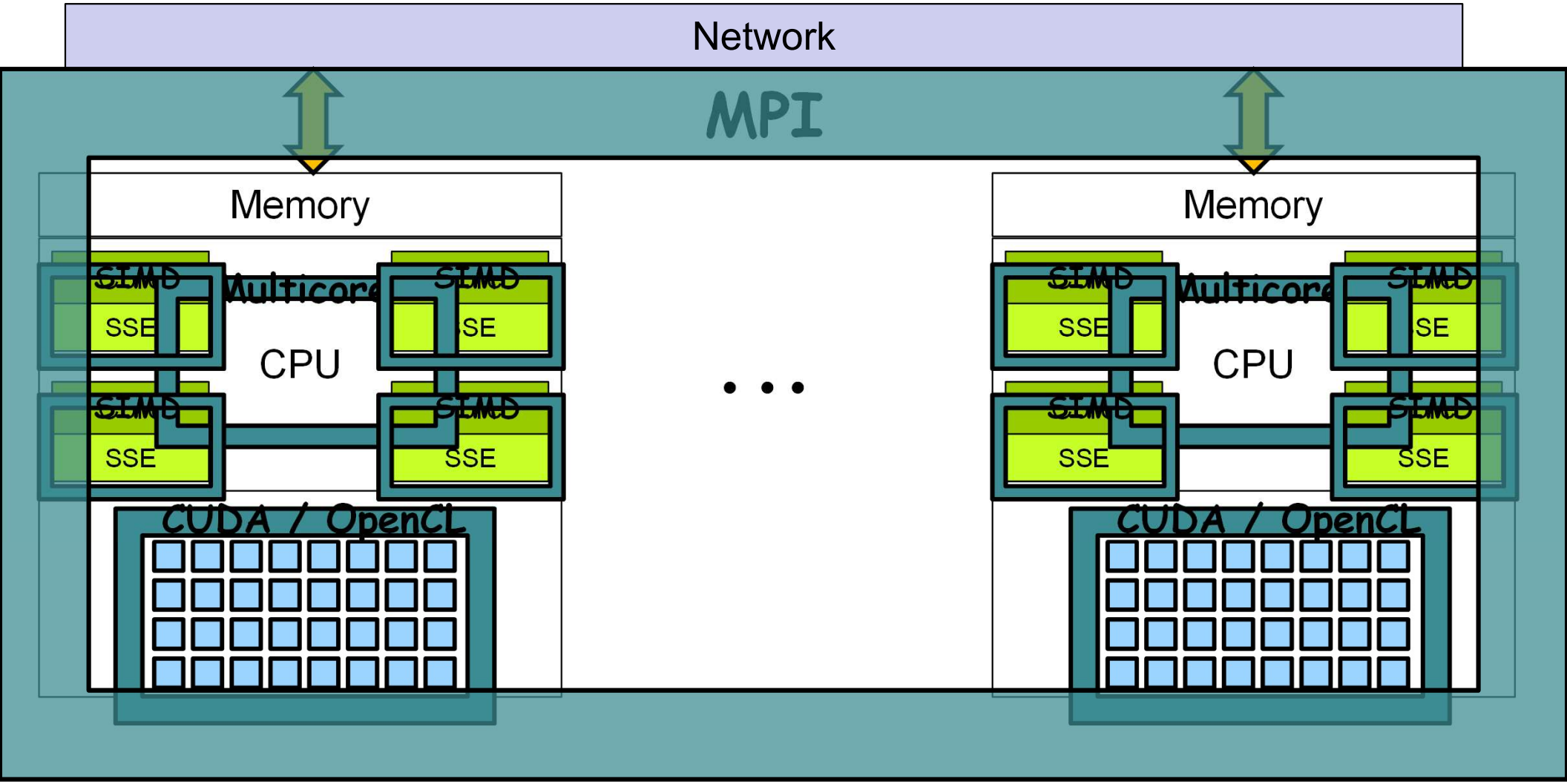


1. Multicore OpenMP
2. CPU SIMD
3. GPU

What is "4", Alex?

This is how modern supercomputers work!

And, over the last 10 weeks, you have learned about using all 4 – congratulations!



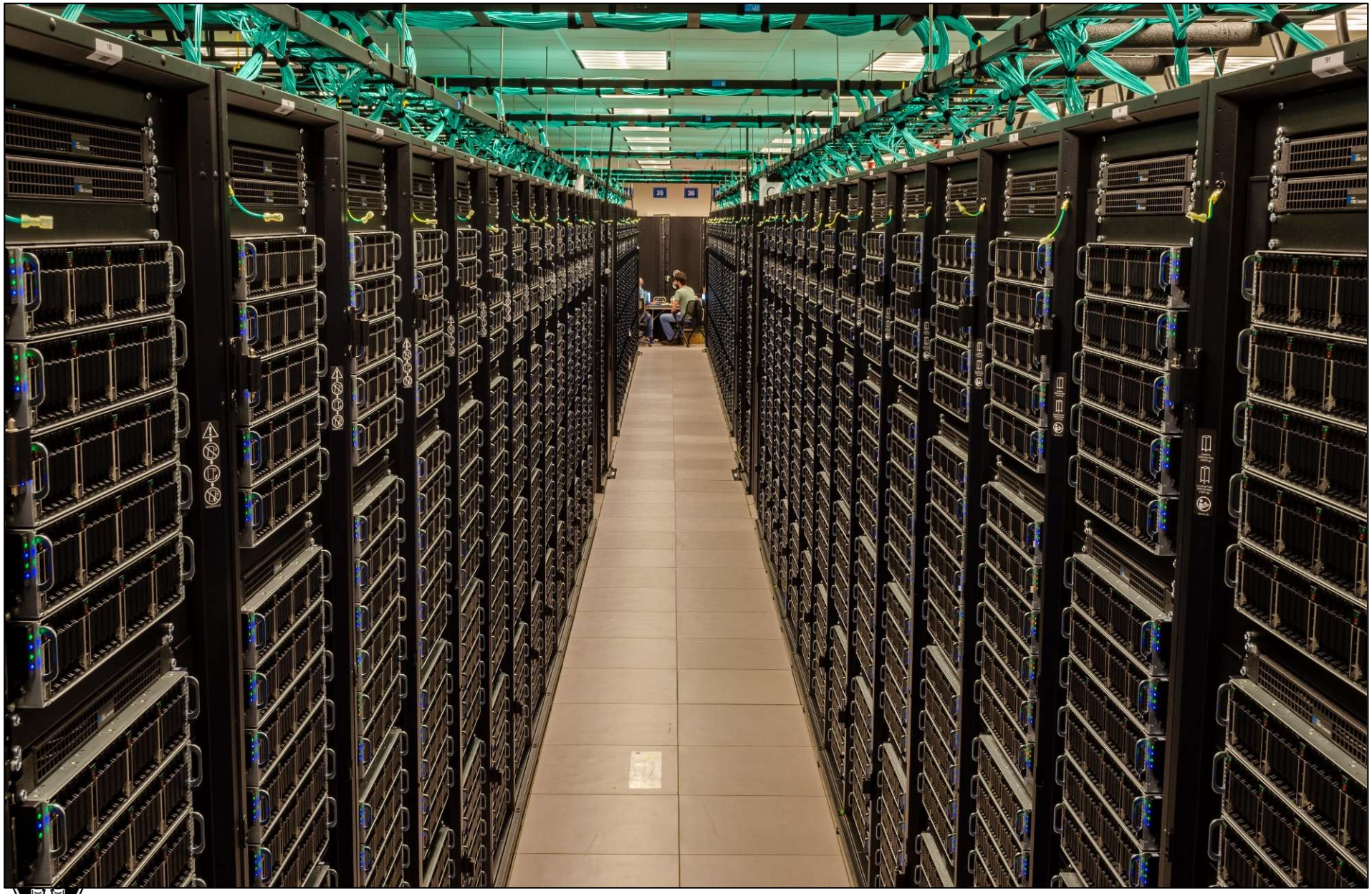
Oregon State University
Computer Grap

IN A MULTI-CPU DISTRIBUTED SYSTEM, THIS IS THE TOTAL NUMBER OF DIFFERENT KINDS OF PARALLELISMS THAT WE COVERED THIS QUARTER

1. Multicore OpenMP
2. CPU SIMD
3. GPU
4. MPI

and, they can *all* be active within the same application!

This is how modern supercomputers work!



The Texas Advanced Computing Center's new *Frontera* supercomputer, currently the 5th fastest in the word