

# Live Lecture Chat Window

## June 7, 2023

**15:15:22 Where could I download this page [the More Information document]?**

It's near the end of the list of handouts on our Class Resources page.

**15:23:39 Can you explain Slurm? can you explain SBATCH?**

The DGX and the cluster are resources shared by *many* people. Slurm is a resource manager that acts as a traffic cop to give people access to the resources. The sbatch command submits your request for the resources to the traffic cop. The #SBATCH lines in the script tell slurm about what resources you want and how you want them.

**15:32:52 In OpenCL events are wait events similar to barriers in our earlier programs?**

I think of a barrier as much more of a blunt instrument than events. Barriers affect *all* running resources. I think of OpenCL events as more surgical. It affects only the Enqueued commands that it needs to.

**15:51:11 Is there an advantage of SIMD over OpenCL or CUDA if you're already using OpenCL/CUDA elsewhere in your program?**

CPU SIMD would probably be faster for doing arithmetic on "small" arrays to avoid the setup of GPU threads.

**15:58:11 What are interesting or innovative uses for parallel processing? Especially, what could be done at home with a gaming computer?**

Biggest things I am aware of now are deep learning, cryptography, bioinformatics, and data mining. The production studios' render farms would also be a good example.

**16:00:16 I'm curious about your thoughts on the Apple Vision Pro, especially the new R1 chip.**

I've probably read the same articles that you've read. Can't really offer an opinion until I've tried one. It's interesting that they have priced it at exactly the same point as the Microsoft Hololens 2.

**16:03:22 Yeah, I meant to ask, is SETI@home type of stuff using MPI or something like it?**

Probably not MPI exactly (because that would require you to install the MPI drivers on your home system), but something with almost the same functionality: accept a program and data, munch on the data, return results.

**16:20:49 [Question on what the Intro to Graphics class will cover in the FQ]:**

Go to:

<http://cs.oregonstate.edu/~mjb/cs550>

to see what we did last year. It will be different this coming year, but will be close.

**16:29:11 Running project 7 on the MPI cluster should not take 35+ mins to run right?**

It should not. Should take a couple of minutes at most.