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In order to parallelize the Raytracer, we pretty much just worked off the existing code that we had. There was a double 'for' loop which we turned the contents of into a kernel. Then we just had to convert a few existing helper functions into device functions, a couple of classes into structs and launch the kernel with the correct number of threads and blocks.

With 100 spheres and a 1000x1000px image:

The CPU version takes an average of 1.387 seconds to run.

The CUDA version takes an average of 0.224 seconds to run.

The scene looks like this:

