

1. Name of Seminar Speaker (s).

Scott Aaronson

2. Title of the Presentation

Quantum Computational Supremacy

3. Location and Time of Presentation

Online with ACM Learning at 12:00 PM EDT on September 9th

4. 1 Paragraph Summary of the presentation

Quantum supremacy refers to the first use of a quantum computer to do some well-defined mathematical task faster than we know how with any classical computer on earth. The talk went over what is quantum supremacy? How is it measured? What kind of tasks are being used to measure quantum supremacy? Then finally what are the recent claims of quantum supremacy and how legitimate are they?

5. A description of something new or useful you learned from the seminar

I learned that the current tests that are being conducted with quantum computers are really in the very early stages. The tasks that are being done with these computers are the bare minimum of what can be considered a nontrivial task. I also thought that the problem of verification was very interesting as well, because with these complex tasks a quantum computer is doing the verification of correctness is also very complex.