

Four Questions about Quantum Computing

1. What is quantum computing?
2. What has been done?
3. Where is it going?
4. What does quantum computing say to quantum physics?

Four Questions about Quantum Computing

1. What is quantum computing?

- (surprisingly difficult to answer)

2. What has been done?

- (what I found out on my summer vacation)

3. Where is it going?

- (speculation)

4. What does quantum computing say to quantum physics?

- (epistemological analysis)

Four Questions about Quantum Computing

1) What is quantum computing?

- Quantum algorithms
- Quantum circuits
- Quantum machine analogous to Turing machine

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2) What has been done?

- Particles
- Photons
- Superfluids
- Junctions

Four Questions about Quantum Computing

3) Where is it going?

- Junctions
- Superfluids

Four Questions about Quantum Computing

4) What does quantum computing say to quantum physics?

- Does entanglement exist?
- What are the *real* statistics?
- Is the theory still satisfactory?

Links

- [Supercool Dude .. A chat with Anthony J. Leggett](#)
- [The Hdirt factor : a chat with John Martinis](#)
- [Frustrated bosons on a two-leg ladder : a chat with Simon Trebst](#)
- [Topological quantum computation : a chat with Michael Hermele](#)
- [Quantiki](#)
- [Google Research : Machine Learning With Quantum Algorithms](#)
- [DWaveSys.com](#)
- [My Quantum Computing Page](#)
- [QCL](#)
- [qasmcirq Quantum Circuit Viewer](#)