



Building A Computer Without A Computer.

(Introduction To Error Correction And Fault Tolerance Computation.)

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Hebrew University of Jerusalem

Qubit meeting 2022-23, Israel Quantum Tech Community.

The Goal Of The Talk

Blocktitle

- Motivation. Answer on what we are fighting for. Give a non-cryptographic advantage of quantum computing.

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- Motivation. Answer on what we are fighting for. Give a non-cryptographic advantage of quantum computing.
- Reviewing the current status and latest results. Sharing the view of the errors correction scientist.
- Engaging. Build a common language, explain all the frightening terms (Noise, Thresholds, NISQ, Advantage). Talking Business.

Motivation.

The Question.

Why should we have a Quantum Computer?



Motivation.

The Question.

Why should we have a ~~Quantum~~ Classic Computer?



Motivation.

The Question.

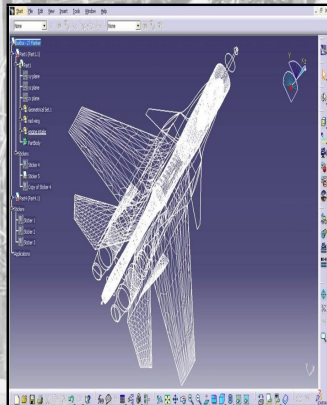
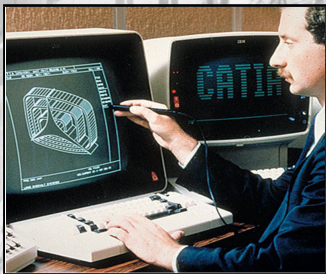
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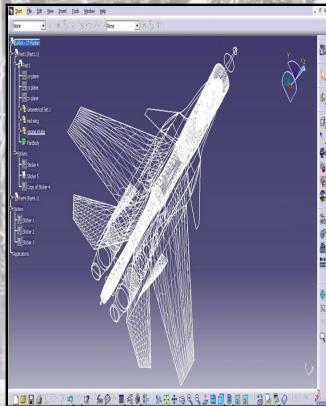
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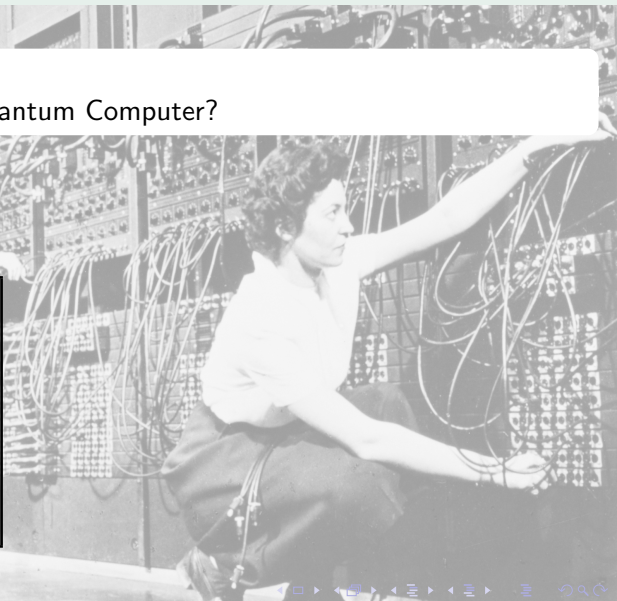
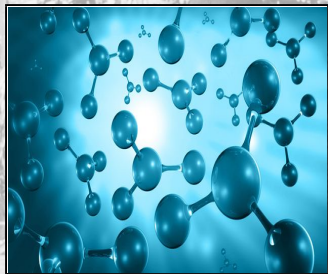
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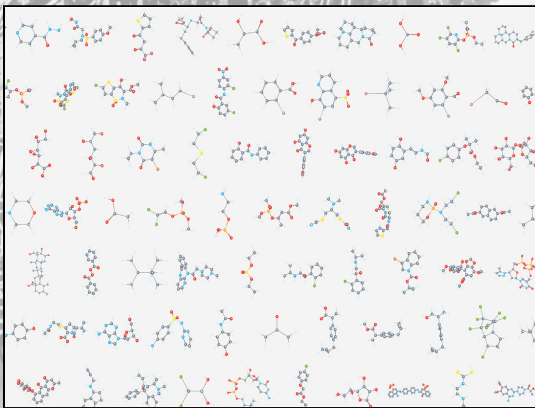
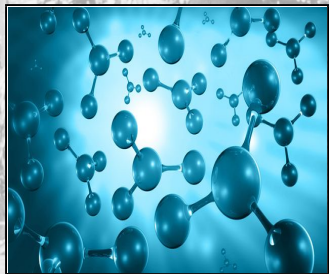
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Electronic Structure in a Fixed Basis is QMA-complete

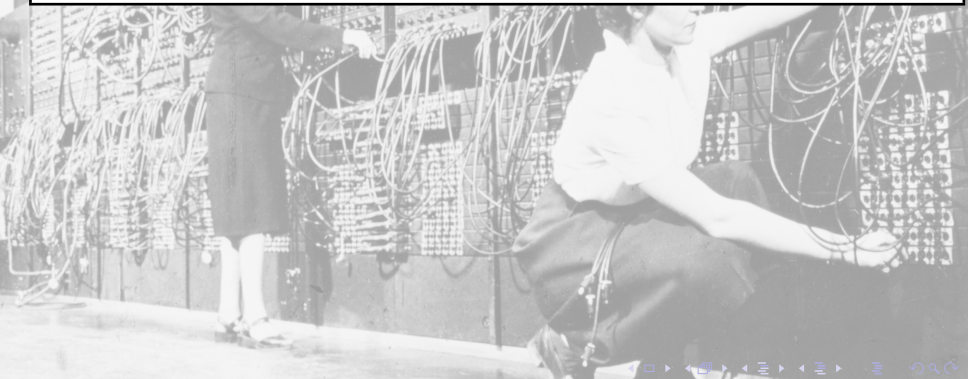
Bryan O'Gorman*

Sandy Irani[†]

James Whitfield**

Bill Fefferman[‡]

March 16, 2021



Electronic Structure in a Fixed Basis is QMA-complete

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Asymptotically Good Quantum and Locally Testable Classical LDPC Codes

Pavel Panteleev and Gleb Kalachev*

January 24, 2022

About this Presentation.

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Sounds Grate, Whats is the catch?

here you can put any text/equation etc. $a^2 + b^2 = c^2$.

Wait a minute.

here you can put any text/equation etc. $a^2 + b^2 = c^2$.

This is the second slide

A bit more information about this

Some random text.