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>>

>> Anyway, this is just a suggestion... let me know what you think!

>>

>> Cheers,

>>

>> --Yi-Kai

>>

>>

>> From: Reid, Andrew C.E. (Fed) <andrew.reid@nist.gov>

>> Sent: Thursday, December 13, 2018 5:01:45 PM

>> To: Miller, Carl A. (Fed)

>> Cc: Liu, Yi-Kai (Fed)

>> Subject: Re: Informal but technical quantum computing talk?

>>

>>

>> OK, thanks for the reply, and the tips for ways forward!

>>

>> -- A.

>>

>> On Thu, Dec 13, 2018 at 03:52:05PM -0500, Miller, Carl A. (Fed) wrote:

>>> Hi Andrew --

>>>

>>> I won't be a good person to give that talk, unfortunately -- my expertise is mainly in quantum cryptography. We'll see if Yi-Kai is interested?

>>>

>>> The two people in my group (besides me) who specialize in quantum are Gorjan Alagic and Bill Fefferman. I'm not sure if either is a good match for this, although Bill Fefferman's publication list:

>>>

>>> [https://na01.safelinks.protection.outlook.com/?url=http%3A%2F%2Fwww.billfefferman.com%2F%3Fpage\\_id%3D158&data=02%7C01%7Cyi-kai.liu%40nist.gov%7Cdde161375dee4829da6a08d68d4d4a50%7C2ab5d82fd8fa4797a93e054655c61dec%7C1%7C0%7C636851760428040233&data=CyrqfjaMkZ2qxqbCT1CGPTbzxjwU9rXMzjUJVd49WEc%3D&reserved=0](https://na01.safelinks.protection.outlook.com/?url=http%3A%2F%2Fwww.billfefferman.com%2F%3Fpage_id%3D158&data=02%7C01%7Cyi-kai.liu%40nist.gov%7Cdde161375dee4829da6a08d68d4d4a50%7C2ab5d82fd8fa4797a93e054655c61dec%7C1%7C0%7C636851760428040233&data=CyrqfjaMkZ2qxqbCT1CGPTbzxjwU9rXMzjUJVd49WEc%3D&reserved=0)

>>>

>>> does include some papers related to quantum computation.

>>>

>>> Good luck!

>>>

>>> -Carl

>>>

>>> \_\_\_\_\_

>>> Carl A. Miller

>>> Mathematician, Computer Security Division

>>> National Institute of Standards and Technology

>>> Gaithersburg, MD

>>>

>>>

>>> On 12/12/18, 4:49 PM, "Reid, Andrew C.E. (Fed)" <andrew.reid@nist.gov> wrote:

>>>

>>>

>>> Hi Carl, Yi-Kai --

>>>

>>> This request was initially made to Stephen Jordan, with whom

>>> I was familiar from a previous public lecture, and who recommended

>>> one or both of you given that he has left NIST.

>>>

>>> I run a fairly informal speaker series in MML on computational

>>> methods -- the itch that I am scratching is that we often hear

>>> a lot about interesting new computational techniques, but have

>>> difficulty getting past the popular-media versions of them, we

>>> know there's substantive technical content that's interesting

>>> and probably accessible, but nobody is presenting it.

>>>

>>> You might get some flavor of it from the Sharepoint site,

>>> which is here:

>>> > <https://nistgov.sharepoint.com/sites/ComputationalMethods/>

>>>

>>> I'd like to have someone speak on quantum computing -- it

>>> certainly fits the bill, it's definitely not magic, but popular

>>> media presentations are pretty frustrating for someone with

>>> a technical background and good analytical skills, but without

>>> a knowledge of how these systems work.

>>>

>>>

>>> Would you be willing to make such a presentation?

>>>

>>>

>>> I want to emphasize that the audience should be assumed to

>>> be technically and analytically sharp, so while a brief refresher

>>> on quantum mechanics might be warranted, I would recommend that

>>> the emphasis be on the space that qubits live in, and the existence

>>> of interesting gates that can combine them in useful ways.

>>>

>>>

>>> Not being an expert, I hesitate to suggest a target, but I am

>>> personally curious if it would be possible to get from "here is

>>> a qubit" to "here's how factorization works" in a 60 or 90 minute

>>> talk. My own efforts have included skimming the relevant

>>> chapters of Nielsen and Chuang, but not all of the audience

>>> will have done that, of course.

>>>

>>>

>>> Does this sound like something you'd be willing to take on?

>>>

>>>

>>> As for timing, the holiday season makes things a bit

>>> complicated, I have a speaker for a mid-January slot, but

>>> mid or late February might be reasonable.

>>>

>>>

>>> Please let me know if this sounds like something you could

>>> do, or if you can recommend someone else.

>>>

>>>

>>> Thanks!

>>>

>>> --

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>>> --

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