From:	Perlner, Ray (Fed)
To:	Liu, Yi-Kai (Fed)
Subject:	New updated files
Date:	Monday, August 14, 2017 5:18:00 PM
Attachments:	Brownian.pdf References.bib Brownian.tex llncs.cls splncs.bst

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Added references, plus a section including scaling for the size of the oracle query circuit.

-----Original Message-----
From: Liu, Yi-Kai (Fed)
Sent: Thursday, August 03, 2017 4:36 PM
To: Perlner, Ray (Fed) <ray.perlner@nist.gov>
Subject: Re: Here's what I have so far

Hi Ray,

Thanks, I'll take a look! (I probably won't get to it until late next week, though... sorry for the delay...)

--Yi-Kai

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From: Perlner, Ray (Fed)
Sent: Wednesday, August 2, 2017 4:16:19 PM
To: Liu, Yi-Kai (Fed)
Subject: Here's what I have so far

I haven’t added references yet or an introduction and conclusion.

Things I might want to elaborate on more:

The issue of scale independence as it relates to the relation between temperature and speed of computation.
The behavior of clock rate in the irreversible computing regime (limited by radiative cooling)
The dependence of complexity on the size and depth of circuits for oracle queries
Tani’s claw finding algorithm (I think it behaves exactly like the BBT algorithm in this model.)

Some argument for the practical relevance of the classical version of the Grover speedup. (Basically it boils down to whether a big memory costs more than the nonsense you have to deal with to get quantum computing to work. E.g. temperatures on the order of 10mK)