



SDI Review Form 1.6

Journal Name:	Physical Science International Journal
Manuscript Number:	2015_PSIJ_18414
Title of the Manuscript:	THE COMPUTATIONAL LIMIT TO QUANTUM DETERMINISM AND THE BLACK HOLE INFORMATION LOSS PARADOX
Type of the Article	Original Research Article

General guideline for Peer Review process:

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound.

To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

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PART 1: Review Comments

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
<u>Compulsory</u> REVISION comments	The paper follows the standard formalism of quantum mechanics where changes in state refer to changes in phase, say, relative to an observer. A true change of state entails change in energy as the system dissipates to its surroundings or vice versa. Therefore quantum mechanics is not an adequate theory to describe, for instance, computation which is always a dissipative process. The proper way to describe changes of state is the principle of least action in its original form by Maupertuis, equivalent to the 2nd law of thermodynamics (see e.g., Annala A. Physical portrayal of computational complexity. ISRN Computational Mathematics 2012 321372, 1–15. arXiv/0906.1084). I think the readers ought to be informed about that quantum mechanics is a unitary theory, but computational processes do not conserve energy. The NP problems are hard because the computation itself alters the problem, i.e., boundary conditions. In other words variables cannot separated to solve the equation of motion. Once this is made clear to the readers, they will understand the limitations of the adopted approach and hence are able to judge the obtained results accordingly. I encourage the Author to provide accurate account of reality.	
<u>Minor</u> REVISION comments	Perhaps only a conversion problem, but numerous words are missing space in between.	
<u>Optional/General</u> comments		

Reviewer Details:

Name:	Arto Annala
Department, University & Country	Department of Physics University of Helsinki, Finland