

## Review of: "Ternary instantaneous noise-based logic"

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The article "Ternary instantaneous noise-based logic" discusses some unique operations of noise based logic. The paper is merely a continuation of the author's previous works.

I have some confusions over the following points, which should be written clearly in the text.

- 1. In the paper authors have mentioned it as NBL gates. Is there any such human-made gate in reality following those operations (other than brain)? Or is this purely a proposal for a logic operation?
- 2. I don't understand how equation 7 (and the followings) can be materialized if we consider a binary system. Binary-high multiplied by binary-low will be low in my opinion! Even in case of wave interference we get a low value if a crest falls on a trough. My question is how an uncertainty can be generated using a product of two certain values? A little more discussion or a reference on that will be helpful.
- 3. The names 'Vacuum' and 'Squeezed' states are unnecessarily borrowed from quantum optics!
- 4. Similar confusion I have for equation 14. It indicates the creation of uncertainty from certain values! Is there any example where it can be used?

In conclusion I would say the paper should contain more physical explanations of its proposed formulae.

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