

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

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Potential competing interests: No potential competing interests to declare.

The paper proposes to extend the author's earlier work on noise-based logic to the ternary case. The work is still at a very early stage, and in my opinion, is not yet ready for publication. Here are a few comments for the author to consider:

- 1. The concept of vacuum states requires further explanation. Is a vacuum state simply an invalid logic state that should be avoided (similar to metastable states in binary logic)?
- 2. The claim that the third bit value is useful for representing uncertainty is interesting but requires further quantification, perhaps with an example.
- 3. The performance of the proposed scheme should be compared against other noise-based or stochastic computing methods. The current list of references consists almost exclusively of self-citations, which is highly undesirable.
- 4. It would be helpful to include examples in which TINBL is used to implement practical algorithms. These implementations could then be analyzed to compare the performance of TINBL with other logic schemes.
- 5. The word "fourth" is mis-spelled as "forth" several times.

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