

Peer Review

# Review of: "A Review of Formal Methods in Quantum Circuit Verification"

Elena Pagani<sup>1</sup>

1. Computer Science, University of Milan, Italy

The paper reviews the work in the literature concerning formal verification of quantum circuits.

The paper is well-written and organized. The considered problem is described in simple terms. The paper provides a clear overview of the techniques for formal verification studied in the work, and a thorough review of the literature. The outlook to future research directions is very interesting.

What I miss most in the work is the lack of some tables and considerations that compare the different verification techniques from a quantitative point of view, so as to enable readers to assess how well the different techniques cope with the difficulty of verifying quantum circuits and scale with the problem. As examples of quantitative indexes, the time spent to complete the verification and the amount of computer memory used should be considered.

## Declarations

**Potential competing interests:** No potential competing interests to declare.