

Review of: "WaveBit — Nonbinary Computation: I Symmetric Cryptography"

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Potential competing interests: No potential competing interests to declare.

Information encoding has been, up to now, an open problem since many algorithms used to encode information have been vulnerable, causing significant damage in many aspects.

This manuscript shows an alternative way to encode information, in this case, text messages, by mapping each character of the message into a wave.

According to the algorithm and its description, the frequencies of each wave play the most important role since that is where the difference between one character and another is determined.

In the studied case of the string "Hello, world" and in Figure 3b, the character "l" has two different encodings, which makes said encoding more secure. Is there some difference between capital letters and lowercase letters?

On the other hand, the procedure for decoding said message is not described in detail in this manuscript, as was done for the previous part.

In my opinion, the manuscript is very interesting and could be published, considering that the authors should explain in more detail the decoding process; for example, in Figure 4, the blue peaks do not match the number of characters in the string, including the space.

On the other hand, the frequency peaks in the spectra in Figure 5 represent each of the characters of the word "hello"; the authors should explain, in a generalized way, the way to distinguish the frequency spectra of each character, considering, for example, that the letter "l" displays two different spectra.

Finally, Figures 1 and 2 must be within section III.