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Title: Mutation mechanism in DNA: Non-Hermitian approach

Abstract: Structure of DNA respects some known quantum features. By examining the hermitian aspects of some special regions in DNA, called palindromes, we have shown that they contain some unknown interesting symmetries. This is in fact explained by the unitary structure of DNA. Then, we investigate the mutation mechanism in DNA, which can be explained by deforming the known hermitian structure of DNA and making it non-hermitian. We show that biologically stable mutations can be obtained, which is provided by Weyl's Perturbation Theory. This leads us to control the mutation mechanism in DNA structure.

References:

1. Tibatan, M.A.; Sarisaman, M. Unitary structure of palindromes in DNA. *BioSystems* **211**, 104565 (2022).
2. Sarisaman, M., Tibatan, M. A. And Uzunal, S. A quantum formalism for Mutation Mechanism in DNA: Non-Hermitian Approach, Submitted.