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## Dynamical Relation of Poisson Spike Trains in Hodkin-Huxley Neural Ion Current Model and Formation of Non-Canonical Bases, Islands, and Analog Bases in DNA, mRNA, and RNA at or near the Transcription

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**Abstract :** Groundbreaking application of biomathematical and biochemical research in neural networks processes to formation of non-canonical bases, islands, and analog bases in DNA and mRNA at or near the transcription that contradicts the long anticipated statistical assumptions for the distribution of bases and analog bases compounds is implemented through statistical and stochastic methods apparatus with addition of quantum principles, where the usual transience of Poisson spike train becomes very instrumental tool for finding even almost periodical type of solutions to Fokker-Plank stochastic differential equation. Present article develops new multidimensional methods of finding solutions to stochastic differential equations based on more rigorous approach to mathematical apparatus through Kolmogorov-Chentsov continuity theorem that allows the stochastic processes with jumps under certain conditions to have  $\gamma$ -Holder continuous modification that is used as basis for finding analogous parallels in dynamics of neutral networks and formation of analog bases and transcription in DNA.

**Keywords:** Fokker-Plank stochastic differential equation, Kolmogorov-Chentsov continuity theorem, neural networks, translation and transcription

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