

# A SURVEY ON STANDING WAVES FOR FITZHUGH-NAGUMO EQUATIONS

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Since the pioneer work of Hodgekin-Huxley in early 1950's, mathematical models have been employed by neuroscientists and mathematicians alike to understand the mechanisms governing excitation and propagation of action potentials along neurons. It is a daunting task in view of the complexity of observed phenomena. A simpler system of FitzHugh-Nagumo equations has been proposed. These latter equations support both standing and traveling waves of action potential.

In this talk we will review some works on standing waves of FitzHugh-Nagumo equations. Different methods have been found to be useful for different physical parameters regime.