

Modeling of Neuronal Activations - Dead Zones - A new paradigm

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Abstract: This talk is based on my current research in neuronal activational dynamics. In this talk, I propose a new mathematical model to describe the activational interactions among the neurons in the brain. We introduce a new concept termed as a DEAD ZONE (meaning a zone of no activation). This mechanism contributes to the understanding of some neurological disorders such as seizures. Also, dead zones are found to play a vital role in designing effective control mechanisms. Mathematical analysis of the model equations is carried under the strict biological frame work.

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