

# Presynaptic Neural Information Processing

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**Abstract:**

The potential for presynaptic information processing within the arbor of a single axon will be discussed in this paper.

Current

knowledge about the activity dependence of the firing threshold, the conditions required for conduction failure, and the similarity of nodes

along a single axon will be reviewed. An electronic circuit model for a site of low conduction safety in an

axon will be presented. In response to single frequency stimulation the electronic circuit acts as a lowpass filter.