

Multiple Spike Train Data Analysis

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Abstract

A common experimental method in neuroscience involves the recording of the activity of a single neuron. However, studies of the functional connectivity of collections of neurons and their behavior require the simultaneous recording of their activity. Current technology permits such recordings of over a hundred neurons. These recordings yield large data sets that present challenging problems in their analysis and their interpretation in biological terms. In this talk, we describe recent work on various techniques for detecting functional connections between neurons and describing the nature of those connections.