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Sommario/riassunto

Neurons in the brain communicate with each other by transmitting sequences of electrical spikes or action potentials. One of the major challenges in neuroscience is to understand the basic physiological mechanisms underlying the complex spatiotemporal patterns of spiking activity observed during normal brain functioning, and to determine the origins of pathological dynamical states such as epileptic seizures and Parkinsonian tremors. A second major challenge is to understand how the patterns of spiking activity provide a substrate for the encoding and transmission of information, that is, how
