



Mathematical Models and Novel Data-Analyzing Methods in Neuroscience

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Deadline for manuscript
submissions:

31 October 2024

Message from the Guest Editors

Dear Colleagues,

Neuroscience is one of the fastest growing elements of natural science. Recent advances in neurotechniques have greatly accelerated neuroscience research and accumulated a vast amount of data. However, even with the growing numbers of neuroscience experiments, these experimental studies are not yet sufficient to unveil the functional meaning of the observations made, or their underlying mechanisms. Data analyzing methods and mathematical models are essential approaches to understanding the dynamics of neural systems and their implications in information processing. Therefore, this Special Issue aims to present the recent studies on both mathematical models and data-analyzing methods in neuroscience. Those studies include, but are not limited to, novel methods analyzing electrophysiology data, models for subcellular structure, synapses, neurons, neuroglia cells, and neuronal networks. Additionally, abstract models and brain-inspired learning algorithms are welcome.





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Message from the Editor-in-Chief

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