DESCRIPTION

A multidisciplinary journal dedicated to the theoretical, experimental, computational, and clinical understanding of the brain development, physiology, function, and pathology.

The journal offers an open-access multidisciplinary publishing platform (under the format of letters, research articles, and reviews) to researchers interested in physical aspects of the brain. In particular, Brain Multiphysics' goal is to disseminate high quality theoretical, computational, experimental, and clinical work on physical mechanisms and properties (e.g., biochemistry, electrophysiology, fluid and solid mechanics) relevant to the wider context of the physiology, pathology, and cognitive functions of the brain. The journal will consider experimental, clinical, theoretical, or computational studies aimed at improving our understanding of the brain or developing new methods to probe the fascinating inner working of the brain. While the journal welcomes contributions in any particular area of brain physics, we encourage work combining multiple physical field, across multiple scales, and/or involving multidisciplinary collaborations.

The following list of topics is indicative but not exhaustive:

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Neuronal networks (static, dynamic, higher-order)
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Cancer progression
Vascular and cerebrospinal fluid mechanics
Brain trauma
Cerebral oedema
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