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Non-algorithmic Mathematical Models of Biological Organization

Guest Editor:

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Deadline for manuscript submissions: **28 February 2025**

Message from the Guest Editor

Understanding the biological organization from nonalgorithmic mathematical models is one of the most important fields in mathematical biology. We welcome articles, reviews, communications, hypothesis, essays and opinions that aim to advance the use of the (M,R)-system and other non-algorithmic mathematical models in the understanding of the causality of biological systems organization involving self-fabrication -autopoiesis- and hence cognition, autonomy and anticipation and the fundamental differences with respect of artificial systems and non-biological systems. We welcome articles related to any of these topics:

- Categorical and indicational models of the causality of biological organization;
- Modelling relation between autopoietic and (M,R)-systems;
- Formal and causal differences of biological and non-biological systems;
- Cognition, autonomy, anticipation and selfreference in the causal organization of biological systems;
- Scales of realization or instantiation of autopoietic and (M,R)-systems;
- Novel non-algorithmic mathematical methods to study biological organization.









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Message from the Editor-in-Chief

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