

## Special Issue

# Statistical Physics for the Digital Economy

### Message from the Guest Editors

This Special Issue welcomes contributions primarily in the following research areas, using standard statistical physics tools (network theory, stochastic processes, phase transitions, information theory and inference, etc.):

- Stability, functioning and vulnerability of peer-to-peer systems, including DLT, blockchains and decentralised marketplaces.
- Impact on the standard banking system of new players (BigTech firms, challenger banks).
- Unintended consequences of algorithmic interaction (e.g., flash crashes caused by automated high-frequency trading algorithms, spread of misinformation fuelled by bot ecosystems).
- Algorithmic bias and its implications (e.g., in online lending platforms)
- Trust and reputation on decentralised platforms.
- Pricing and valuation of nonstandard financial assets and digital tokens.
- Evolution and competition of new technologies and innovations.
- Collective phenomena and dynamics on crowdfunding and peer-to-peer lending platforms.

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### Guest Editors

Prof. Dr. Tiziana Di Matteo

Dr. Pierpaolo Vivo

Dr. Giacomo Livan

Dr. Silvia Bartolucci

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### Deadline for manuscript submissions

closed (31 August 2020)



## Entropy

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## About the Journal

### Message from the Editor-in-Chief

The concept of entropy is traditionally a quantity in physics that has to do with temperature. However, it is now clear that entropy is deeply related to information theory and the process of inference. As such, entropic techniques have found broad application in the sciences.

*Entropy* is an online open access journal providing an advanced forum for the development and/or application of entropic and information-theoretic studies in a wide variety of applications. *Entropy* is inviting innovative and insightful contributions. Please consider *Entropy* as an exceptional home for your manuscript.

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### Editor-in-Chief

Prof. Dr. Kevin H. Knuth

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