# Special Issue

## Econophysics, Financial Markets, and Artificial Intelligence

### Message from the Guest Editor

Econophysics emerged at the beginning of this century as a beacon of innovation in the frontier between statistical physics and economy in a context where conventional economic theories struggle to explain the complexities of global markets. These mathematical models delve into the intricate interactions between millions of agents, uncovering underlying patterns and universal principles through computational simulations and also analytical calculations. These new research approaches to the market have revealed surprising insights into how markets can decay to statistical equilibrium and the systemic risks that can generate new behaviors and different statistical wealth distributions. Yet, their use is not without controversy, as traditional economists clash with their unconventional approach. Today, a groundbreaking alliance has emerged between econophysics and artificial intelligence. In this Special Issue, papers that aim to reunite both worlds are welcome. By taking advantage of the power of machine learning algorithms, new ideas can emerge on how to implement intelligence into economic agents and mathematical models to delve into the dynamics of markets,

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### Deadline for manuscript submissions

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# About the Journal

### Message from the Editor-in-Chief

The journal *Mathematics* publishes high-quality, refereed papers that treat both pure and applied mathematics. The journal highlights articles devoted to the mathematical treatment of questions arising in physics, chemistry, biology, statistics, finance, computer science, engineering and sociology, particularly those that stress analytical/algebraic aspects and novel problems and their solutions. One of the missions of the journal is to serve mathematicians and scientists through the prompt publication of significant advances in any branch of science and technology, and to provide a forum for the discussion of new scientific developments.

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