

# Call for Papers

## Special Issue: Nonlinear dynamics and complex systems

### *Computational Economics*

The nonlinear dynamic systems approach in economics and finance is revealing increasingly prone to replicate and explain complex phenomena and empirical facts, such as endogenous business or fashion cycles, poverty traps, indeterminacy, irregular time series of financial assets and the resulting excesses of volatility in markets. Evidence of this relevance can be found in the application of the theory of nonlinear dynamic systems in various areas of economic and social research, such as industrial organization, economic growth and development, financial and speculative markets and, in addition, behavioral economics. From a more technical point of view, in order to describe the evolution of the key variables of each of these areas, discrete and continuous time and more recently hybrid dynamic systems are employed. Since this variety of modeling approaches is able to generate the various scenarios defined by the action of economic agents and furnishes consistent suggestions for policymakers, the theory of nonlinear dynamic systems represents a key meeting point between mathematics and the hot topics of contemporary economics. For these reasons, we propose a special issue on Computational Economics in which innovative contributions, through nonlinear dynamic models, to the following topics are welcomed:

- Oligopoly Theory and Dynamic Games;
- Financial and Speculative Markets;
- Micro and Macroeconomic Dynamics;
- Economic Growth and Development;
- Social Dynamics;
- Numerical Methods for Economic Dynamics.

**In each contribution particular emphasis should be placed on the computational approach.**

We would like to encourage participants to the 11th Dynamic Models in Economics and Finance (MDEF-2022) to submit full, extended versions of their presented papers. However, other relevant papers are also welcome. Instructions can be found at:

<https://www.springer.com/journal/10614/submission-guidelines>

Authors should submit a cover letter and a manuscript by **February 28, 2023**, via the Journal's online submission site. When prompted for the article type, please select **Original Research**. On the Additional Information screen, you will be asked if the manuscript belongs to a special issue, please choose yes and

the special issue's title, **Nonlinear dynamics and complex systems**, to ensure that it will be reviewed for this issue. Manuscripts submitted after the deadline may not be considered for the special issue. Papers will be subject to a strict review process under the supervision of the Guest Editors, and accepted papers will be published online individually, before print publication.

Guest Editors:

Andrea CARAVAGGIO

Department of Economics

University of Foggia

Address: Largo Papa Giovanni Paolo II, I-71121 Foggia, Italy

E-mail: [andrea.caravaggio@unifg.it](mailto:andrea.caravaggio@unifg.it)

Gianluca IANNUCCI

Department of Economics and Management

University of Firenze

Address: Via della Pandette 9, I-50127 Florence, Italy

E-mail: <mailto:gianluca.iannucci@unifi.it>

Mauro SODINI

Department of Law

University of Napoli Federico II

Address: Via Mezzocannone 16, I-80134 Naples, Italy

Email: [mauro.sodini@unina.it](mailto:mauro.sodini@unina.it)

Fabio TRAMONTANA

Department of Economics, Society, Politics

University of Urbino

Address: Via Saffi 42, I-61029 Urbino, Italy

Email: [fabio.tramontana@uniurb.it](mailto:fabio.tramontana@uniurb.it)