

INVEST FELLOW PROGRAMME

JOIN OUR WEBINAR

ECONOPHYSICS: HOW PHYSICS CHANGED THE WAY OF THINKING AND RESEARCH IN ECONOMICS

Speaker: Loukas Zacheilas, Professor of Applied Mathematics for Economists

24th of June 2026, 12:00-13:00 CET / 13:00-14:00 EEST



[Click here to register](#)

Organizer: University of Thessaly

Description

Econophysics is an interdisciplinary field that emerged over the last decades, transferring tools, methods, and modes of reasoning from Statistical Physics and the theory of complex systems to the study of economic phenomena. This webinar will present how concepts such as power-law distributions, phases and phase transitions, networks, and collective behavior have contributed to a new understanding of financial markets and economic inequality. It will highlight the critique that Econophysics poses to traditional neoclassical models, particularly regarding assumptions of rationality and normality. At the same time, characteristic examples of successful applications will be discussed, along with the limitations and open challenges of this approach. The aim of the talk is to demonstrate that Physics did not merely provide Economics with new mathematical tools, but introduced a fundamentally different scientific way of thinking for the study of complex socio-economic systems.

Speaker

Dr. Loukas Zachilas was born in Athens, Hellas, in 1960. He studied Mathematics at the University of Athens and he graduated in 1983. In 1988, he obtained a Ph.D. titled "Numerical and Theoretical study of three dimensional stellar systems" from the Department of Physics, University of Athens.

He has published a lot of papers in scientific journals such as: Astronomy & Astrophysics, Astronomy & Astrophysics Supplement Series, Chemical Physics, Molecular Physics, International Journal of Bifurcation & Chaos Applied Mathematics, Journal of Biological Physics, International Journal of Nonlinear Science and Numerical Simulations and Solar Physics. His research interests focus in dynamical systems in two-dimensional and three-dimensional spaces. Models like these arise in Galactic Dynamics, in Applied Economics, in time series analysis and in arms races problems.

