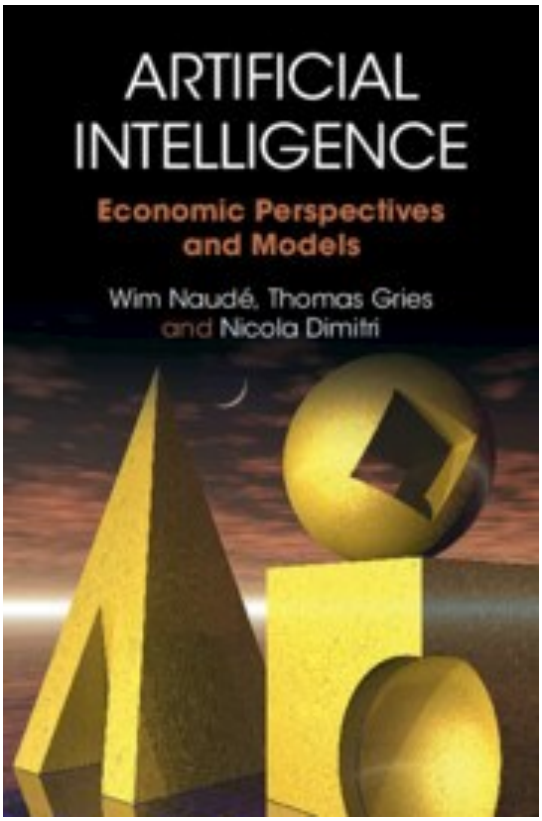
UNIVERSITÀ DI SIENA 1240

Presentation of the volume

DEPS

Artificial Intelligence: Economic Perspectives and Models

By Wim Naudè, Thomas Gries, Nicola Dimitri
(forthcoming Cambridge University Press)



Wednesday 24 April 2024

h 15.00 Aula Romani

Piazza San Francesco, 7 — Siena

Coordination: Nicola Dimitri

Speakers

h 15.10 Marco Gori

University of Siena

What is Artificial Intelligence?

Abstract: This lecture briefly introduces the field of Artificial (AI) Intelligence along with the recent advances in Large Language Models and generative AI. It is pointed out that the methodologies that have been developed mainly in Machine Learning are offering the substrate for new advances also in Economy and Finance. Amongst others, new methodologies are emerging which involve inferential processes that are enabled by big data collections of hybrid structure. The book by By Wim Naudè, Thomas Gries, and Nicola Dimitri entitled "Artificial Intelligence: Economic Perspectives and Models" is a noticeable example of fundamental interdisciplinary achievements that are very welcome in the overall field of AI.

h 15.30 Wim Naudè

RWTH Aachen University, Leiden University and University of Johannesburg

Artificial Intelligence, Population Demographics and Economic Growth: Explosive Growth, or Growth Collapse?

Abstract: This lecture is based on the new book co-authored by Wim Naudé, Thomas Gries and Nicola Dimitri entitled "*Artificial Intelligence: Economic Perspectives and Models*," published by Cambridge University Press. This book, which showcases the modelling of AI, from individual decision-making, to game theoretic analysis of innovation to growth theory and beyond, has a special concern with AI as an innovation in the method of innovation. As such it attempts to address the question: is Artificial Intelligence a more significant invention than electricity? Will it result in explosive economic growth and unimaginable wealth for all, or will it cause the extinction of all humans? It argues that to better understand the impact of AI on economic outcomes, we must fundamentally change the way we think about AI in relation to models of economic growth. In this lecture, the models introduced in the book are applied to ask whether AI can overcome the negative growth implications of demographic decline on innovation, and whether it may even lead to explosive economic growth