1. Record Nr. UNINA9910465238703321

Autore	Velupillai Kumaraswamy <1947-, >
Titolo	Computable foundations for economics / / K. Vela Velupillai
Pubbl/distr/stampa	Abingdon, Oxon : , : Routledge, , 2010
ISBN	9786613831880 1-283-51943-7 1-134-25337-0 0-203-00207-5
Descrizione fisica	1 online resource (513 p.)
Collana	Routledge advances in experimental and computable economics ; ; 4
Disciplina	330.01/5915
Soggetti	Econometrics Economics, Mathematical Econometrics - Computer programs Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and indexes.
Nota di contenuto	Computable Foundations for Economics; Copyright; Contents; Preface; General introduction; PART I Foundations; 1 The uncomputable, the nonconstructive and the undecidable in mathematical economics; 2 Advanced computational complexity theory from an elementary standpoint; 3 Economic dynamics and computation - recursion theoretic foundations for the Icarus tradition; 4 Let's take the con out of mathematical economics; PART II General equilibrium theory; 5 Effectivity and constructivity in economic theory; 6 Algorithmic foundations of computable general equilibrium theory 7 Uncomputability and undecidability in economic theoryPART III Methodology; 8 The unreasonable ineffectivity of mathematics in economics; 9 Aconstructive interpretation of Sraffa's mathematical economics; 10 The computable alternative in the formalization of economics: a counterfactual essay; PART IV Simon's behavioural economics: a computable vision; 11 Computable rationality, computation universality and adaptive behaviour; 12 Boundedly rational choice and satisficing decisions; 13 Arithmetic games, beavers and behavioural economics; Appendix 1 Artificing a rationally unbounded

life

Sommario/riassunto

<P><EM>Computable Foundations for Economics</EM> is a unified collection of essays, some of which are published here for the first time and all of which have been updated for this book, on an approach to economic theory from the point of view of algorithmic mathematics. By algorithmic mathematics the author means computability theory and constructive mathematics. This is in contrast to orthodox mathematical economics and game theory, which are formalised with the mathematics of real analysis, underpinned by what is called the ZFC formalism, i.e., set theory with the axiom of choice. This relia