

"Adam Brandenburger's work on the knowledge requirements implicit in game theory has become classic. These are of profound importance in understanding the relevance of game theory and, indeed, economic theory in general to the real economy. It is very good to have them collected, with an introduction that brings out the underlying themes."

Kenneth J. Arrow

Stanford University, USA

"Three hundred years ago, Francis Waldegrave found the first minimax solution of a matrix game. But in his correspondence with mathematicians Pierre Rémond de Montmort and Nicolaus Bernoulli, Waldegrave counseled that epistemic considerations involving knowledge, beliefs, uncertainty, and incomplete information also mattered. The principal practitioners of game theory, with the notable exceptions of John Harsanyi and Robert Aumann, have ignored this advice. In recent years, these two theorists have been joined by Adam Brandenburger, whose work on epistemic game theory has been collected in this splendid volume. Eight classic papers by Brandenburger with a number of co-authors present an authoritative view of the field while an insightful introduction provides a roadmap to research both present and future."

Harold W. Kuhn

Princeton University, USA

"This book features a collection of foundational papers by Adam Brandenburger in epistemic game theory. Though still evolving, this approach marks a tectonic shift in game theory by offering a new, epistemic dimension which might be compared to the introduction of synchronized sound to motion pictures in the early 20th century: it might not immediately provide a complete picture, but it has the potential of changing the field forever."

Sergei N. Artemov

The Graduate Center of the City University of New York, USA

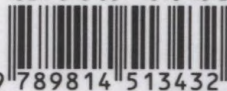
This volume contains eight papers written by Adam Brandenburger and his co-authors over a period of 25 years. These papers are part of a program to reconstruct game theory in order to make how players reason about a game a central feature of the theory. The program — now called epistemic game theory — extends the classical definition of a game model to include not only the game matrix or game tree, but also a description of how the players reason about one another (including their reasoning about other players' reasoning). With this richer mathematical framework, it becomes possible to determine the implications of how players reason for how a game is played. Epistemic game theory includes traditional equilibrium-based theory as a special case, but allows for a wide range of non-equilibrium behavior.

World Scientific

www.worldscientific.com

8844 hc

ISBN 978-981-4513-43-2



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