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## Applications of Information Theory in Economics

Guest Editor:

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### Message from the Guest Editor

The origins of information theory date back to Claude E. Shannon's publication "A Mathematical Theory of Communication" in the *Bell System Technical Journal* in 1948. In terms of the colloquial meaning of information, Shannon's paper focuses the carriers of information and not with information itself. However, the significance and flexibility of Shannon's work was quickly recognized, and many attempts have been enacted to apply his theory in various fields outside its original scope in communication. One such area is economics, particularly econometrics. Many scientists have defined the measures of causality through the combination of Granger causality (a well-known concept established in the econometrics field in 1969) with concepts in information theory such as, for example, transfer entropy.

This Special Issue aims to act as a forum for the presentation of novel approaches in economics using information theory and seeks to aid in the development of new information theoretic research inspired by challenges in economical time series.



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# Special Issue



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## Editor-in-Chief

### Prof. Dr. Kevin H. Knuth

Department of Physics, University  
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## Message from the Editor-in-Chief

The concept of entropy is traditionally a quantity in physics that has to do with temperature. However, it is now clear that entropy is deeply related to information theory and the process of inference. As such, entropic techniques have found broad application in the sciences.

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