

## Waseda International Symposium

「Introduction of general causality to various data and its  
innovation of the optimal inference」

Dates : October 22 -24, 2018

Site: Waseda University, Nishi-Waseda Campus Building 55N Room 02  
(<http://www.sci.waseda.ac.jp/eng/access>)

Presentation: English

Purpose: Professor Granger, a Nobel laureate, introduced a causality for two econometric time series. Granger causality has been applied to graph, network, gene, and epidemiology etc.

In this symposium we will discuss a more general causality, which is applicable to a variety of data, and detects a new hidden factor. The observations are diverse from the usual data to spatio-time observation, discrete time observation from continuous time models, graph, network, high dimensional observation, topological data, gene sequence etc.

The theme of this symposium to develop the optimal statistical inference for the generalized causality, and applications of the theoretical results to detect a new hidden factor from a variety of fields.

We also discuss a lot of statistical methods, e.g., empirical likelihood, estimation of circular distribution, distribution on manifolds etc.

This will contribute a prediction, factor analysis, control of risk in various phenomena.

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