

Center for Social Complex Systems

[Uncovering mathematical structures underlying social systems]

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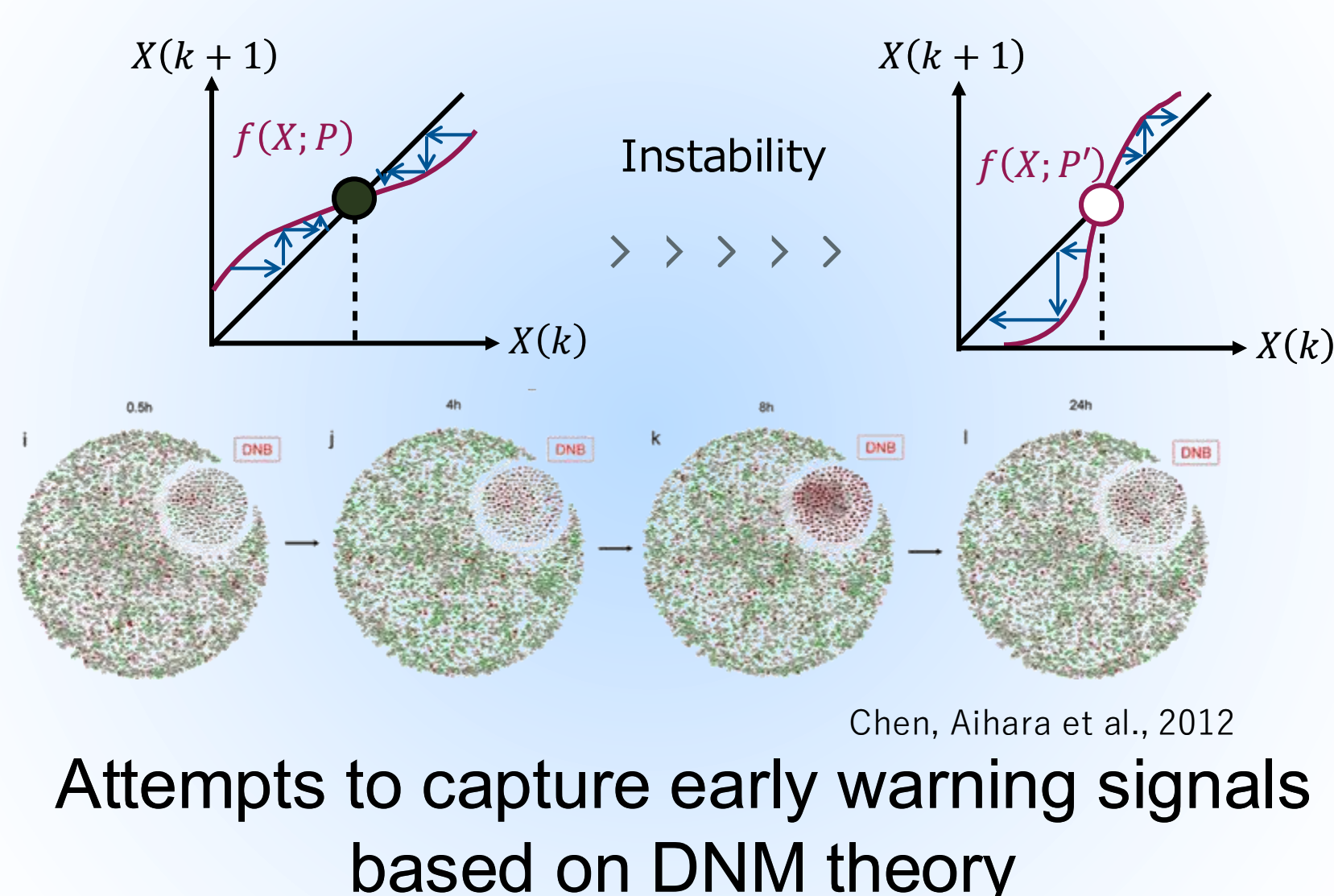
<https://www.cscs.iis.u-tokyo.ac.jp/>

The increasing evolution of social systems leads to increased immediacy of action and future unpredictability. The center views such social systems as nonlinear "complex systems" and aims to analyze mathematical structures and promote creative problem solving collaboration across industry, government, and academia. Analyses of financial markets will be one of the most important research objectives. Frequent market instability and turmoil impact various social, business, and government initiatives. Using advanced time series and network analysis methods, we will initially explore the scientific basis for effective "prediction and control" of financial crises.

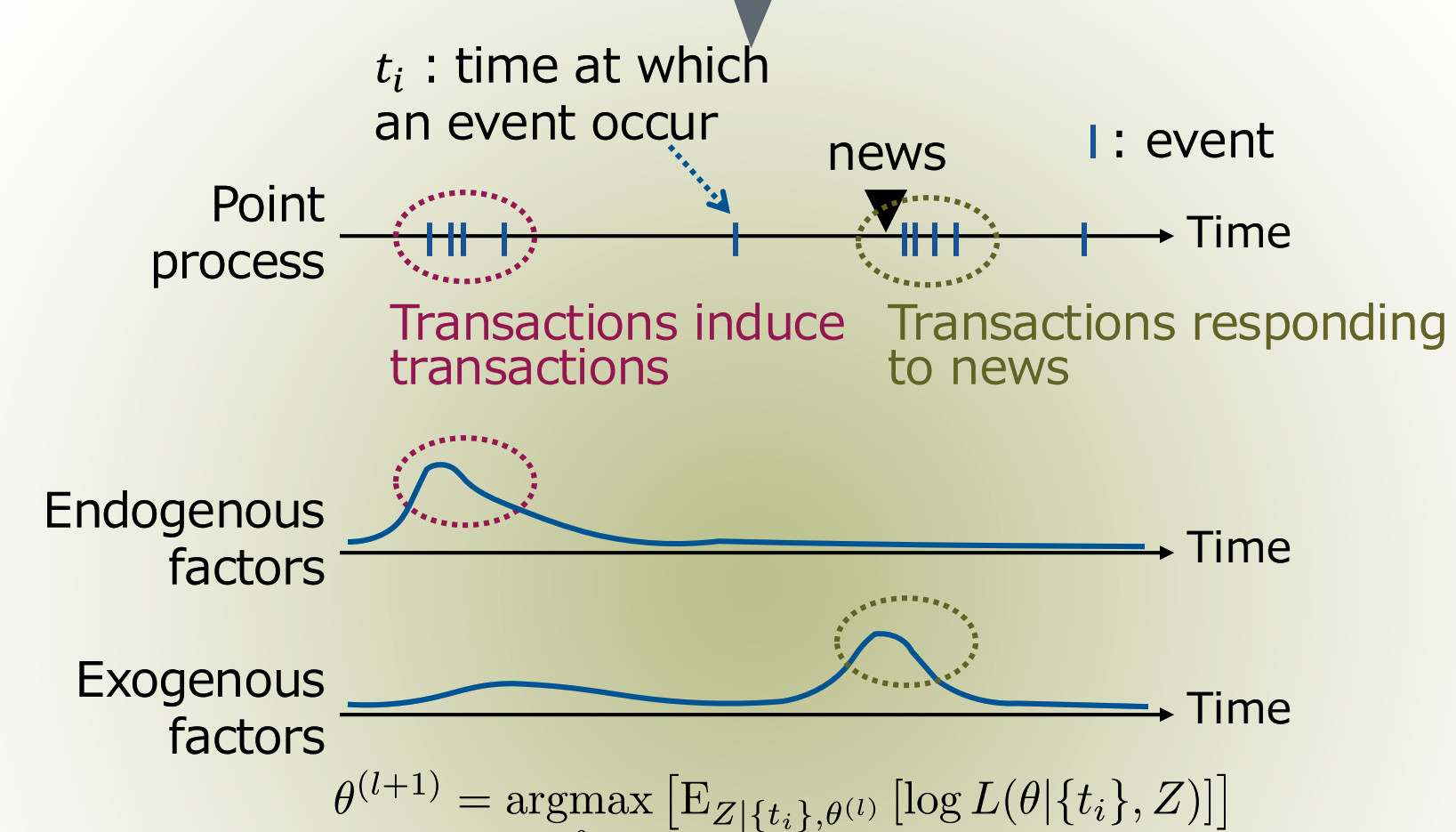


- (1) Researches on financial markets and financial administration using data-driven approaches.
- (2) Training in data analysis methods for FSA staff. Financial literacy education for UTokyo students.
- (3) Establishment of a new funding approach for researches, education and public outreach based on industry-university-government collaboration.

Agreement on academic co-operation between UTokyo and FSA



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複雑社会システム研究センター



Fast algorithm for Hawkes process analysis



Mathematical analyses of financial data