

Program (at a glance)

Tuesday, August 23 4pm–7pm Registration (Sanjo conference hall)

5pm–7pm Welcome reception (Sanjo conference hall)

Wednesday, August 24		Thursday, August 25		Friday, August 26	
9:00–9:20	Opening	9:00–9:30	Luciano Pietronero	9:00–9:30	Masashi Sugiyama
9:20–9:50	Shlomo Havlin	9:30–10:00	Kazuo Yano	9:30–10:00	Henrik Jensen
9:50–10:20	H. Eugene Stanley	10:00–10:30	Siew Ann Cheong	10:00–10:30	Naoki Masuda
10:20–10:40	Coffee break	10:30–11:00	Coffee break	10:30–10:50	Coffee break
10:40–11:10	Woo-Sung Jung	11:00–12:30	Parallel session3	10:50–11:20	Hawoong Jeong
11:10–11:40	Daqing Li	12:30–13:45	Lunch	11:20–11:50	Wei-Xing Zhou
11:40–12:10	Takayuki Ito	13:45–15:00	Parallel session4	11:50–12:20	Didier Sornette
12:10–13:30	Lunch	15:00–15:30	Coffee break	12:20–12:50	Closing
13:30–14:00	Nobuyasu Ito	15:30–16:00	Katsuhiko Nishinari		
14:00–14:30	Takatoshi Ito	16:00–16:30	Rafal Weron		
14:30–15:00	Chin-Kun Hu	16:30–17:00	Erika Legara		
15:00–15:30	Coffee break	17:00–17:20	Coffee break		
15:30–16:30	Parallel session1	17:20–17:50	Beom-Jun Kim		
16:30–16:50	Coffee break	17:50–18:20	Cécile Appert		
16:50–17:50	Parallel session2	19:00–	Banquet		
18:00–19:30	Poster session				

: Koshiba hall

: Sanjo hall

Wednesday, August 24

Session 1 Place:Koshiba hall Chair: Misako Takayasu

9:00 – 9:20 Misako Takayasu and Shlomo Havlin

Opening

9:20 – 9:50 Shlomo Havlin (Invited)

Cascading failures and recovery in interacting networks

9:50 – 10:20 H. Eugene Stanley (Invited)

Novel Statistical Physics Approaches to Understanding Economic Fluctuations

10:20 – 10:40 Coffee break

Session 2 Place: Koshiba hall Chair: Shintaro Mori

10:40 – 11:10 Woo-Sung Jung (Invited)

Bibliometric analysis and complex systems

11:10 – 11:40 Daqing Li (Invited)

(TBA)

11:40 – 12:10 Takayuki Ito (Invited)

Innovating Large-scale Discussion and Consensus Support Systems based on Agent Technologies

12:10 – 13:30 Lunch

Session 3 Place: Koshiba hall Chair: Kota Watanabe

13:30 – 14:00 Nobuyasu Ito (Invited)

Social simulations on the Post-K computer

14:00 – 14:30 Takatoshi Ito (Invited)

Will Human Forex Dealers become Extinct?

14:30 – 15:00 Chin-Kun Hu (Invited)

Indicator prior to financial collapses

15:00 Group Photo

15:00 – 15:30 Coffee break

Session 4-A Place: Sanjo hall (Room A) Chair: Wei-Xing Zhou

15:30 – 15:45 Abhijit Chakraborty, Soumya Easwaran and Sitabhra Sinha

An inverse square law for exchange rate fluctuations ? Probability-distance based analysis relates deviation from universality with macroeconomic indicators

15:45 – 16:00 Huai-Long Shi, Zhi-Qiang Jiang, and Wei-Xing Zhou

Time-dependent momentum and contrarian effects in the Chinese stock market

16:00 – 16:15 Ladislav Kristoufek

Detrending methods for fractional cointegration

16:15 – 16:30 Cancelled

Session 4-B Place: Sanjo hall (Room B) Chair: Naoki Masuda

15:30 – 15:45 Michael M. Danziger, Stefano Boccaletti and Shlomo Havlin

Interdependent and competitive synchronization in networks of networks

15:45 – 16:00 Hirokazu Kawamoto, Hideki Takayasu and Misako Takayasu

Extinction of Links and Resulting Percolation in a Japanese Business Relation Network

16:00 – 16:15 Chandrashekar Kuyyamudi, Anindya S. Chakrabarti and Sitabhra Sinha

Loss of structural balance in the cross-correlation networks of financial market signals the onset of major crisis

16:15 – 16:30 Katsuhide Takahashi, Yuh Kobayashi, Yohei Kondo, Hideki Takayasu and Misako Takayasu

Bipartite Networks of Universities and Companies: Recruiting New Graduates

16:30 – 16:50 Coffee break

Session 5-A Place: Sanjo hall (Room A) Chair: Erika Fille Tupas Legara

16:50 – 17:05 Shota Nagumo, Takashi Shimada, Naoki Yoshioka and Nobuyasu Ito

Trading share competition between artificial stock markets with different tick sizes

17:05 – 17:20 Ye Sun and Yu Chen

A detailed study on the phase diagram of a toy model for macroeconomic systems

17:20 – 17:35 Bin Li, K. Y. Michael Wong, Amos H. M. Chan, Tsz Yan So, Hermanni Heimonen and David Saad

Sharp Rises in Commodity Prices

17:35 – 17:50 Takayuki Hiraoka, Takashi Shimada and Nobuyasu Ito

Collective dynamics of repulsive self-propelled particles

Session 5-B Place: Sanjo kaikan (Room B) Chair: Woo-Sung Jung

16:50 – 17:05 Koutarou Tamura, Hideki Takayasu and Misako Takayasu

Estimation of sales-change caused by structural change of an interfirm trading network and its verification

17:05 – 17:20 Atushi Ishikawa, Shouji Fujimoto, Takayuki Mizuno and Tsutomu Watanabe

Decay rate of firm activities and non-Gibrat's law

17:20 – 17:35 Marcin Makowski, Edward W. Piotrowski and Jan Sladkowski

Anti-Parrondo paradox on data transfer

17:35 – 17:50 Ruiyun Liu and Yu Chen

Analysis of the emergence of log-periodic-power-law in a stock market with a spin model on the network

Session 6 Place: Sanjo hall

18:00 – 19:30 Poster Session

Thursday, August 25

Session 7 Place:Koshiba hall Chair: Kenta Yamada

9:00 – 9:30 Luciano Pietronero (Invited)

New Metrics for Economic Complexity: Measuring the Intangible Growth Potential of Countries

9:30 – 10:00 Kazuo Yano (Invited)

General-Purpose Artificial Intelligence:
Revolutionizing the Productivity, Happiness and Economy

10:00 – 10:30 Siew Ann Cheong (Invited)

Regime Shift in the US Housing Market

10:30 – 11:00 Coffee break

Session 8-A Place: Sanjo hall (Room A) Chair: Daichi Yanagisawa

11:00 – 11:15 Maurits Kaptein, Robin van Emden and Davide Iannuzzi

Lock-in amplifiers and human behavior: opening the toolbox of experimental physics to the social sciences

11:15 – 11:30 Xin Zhang and Dingding Han

Users Participation and Social Influence during Information Spreading on Twitter

11:30 – 11:45 Akira Ishii, Yasuko Kawahata and Ujo. Goto

Model of market share affected by social media reputation

11:45 – 12:00 Kazue Kudo and Kanako Mizuno

Spread of infectious diseases with and without a latent period

12:00 – 12:15 Shuhei Miyano, Koji Oishi, Takashi Shimada, Nobuyasu Ito and Kimmo Kaski

Group Formation through Indirect Reciprocity in Random Sparse Network

12:15 – 12:30 Katarzyna Sznajd-Weron

The diamond model of social response within an agent-based approach

Session 8-B Place: Sanjo hall (Room B) Chair: Rafal Weron

11:00 – 11:15 Jun-ichi Maskawa, Koji Kuroda, Joshin Murai

Collective behavior in market participants with different time horizons

11:15 – 11:30 A. Raul Hernandez-Montoya, Hector Coronel-Brizio and Daniel Jimenez-Alvarez

A statistical analysis of returns of elementary trends time series of financial indices:
Probability distribution, Symmetry and Correlations

11:30 – 11:45 Yan-Jun Wang , Chen-Ping Zhu, and H. E. Stanley

Scaling of Cosine Correlations of Flight-delays in connected airports in American Aviation Networks

11:45 – 12:00 Boon Kin Teh and Siew Ann Cheong

Mesoscopic Dynamics of Financial Markets

12:00 – 12:15 Mieko Tanaka-Yamawaki

Statistical Property of Prices in the Arrowhead Market -Levy's Stable Distribution Or Else?

12:15 – 12:30 Takumi Sueshige, Kiyoshi Kanazawa, Hideki Takayasu and Misako Takayasu

Statistical Property for the Limit Order of Foreign Exchange Market

12:30 – 13:45 Lunch

Session 9-A Place: Sanjo hall (Room A) Chair: Siew Ann Cheong

13:45 – 14:00 Kohei Tamura and Naoki Masuda

Effects of spatial interaction on migration flows

14:00 – 14:15 Chung-I Chou and Choon-Lin Ho

Models of Consensus Formation based on Quantum Walk

14:15 – 14:30 Kiyoshi Kanazawa, Takumi Sueshige, Hideki Takayasu and Misako Takayasu

Kinetic description of the foreign exchange markets

14:30 – 14:45 Marcin Makowski, Edward W. Piotrowski and Jan Sladkowski

Quantum games on networks

14:45 – 15:00 Koji Oishi

Phylogenetic network of armed groups in civil war

Session 9-B Place: Sanjo hall (Room B) Chair: Takeshi Sakaki

13:45 – 14:00 Hayato Goto, Hideki Takayasu and Misako Takayasu

Chain-reaction bankruptcies on Multilayered complex networks

14:00 – 14:15 Marcin Makowski, Edward W. Piotrowski and Jan Sladkowski

Paradoxical consequences of the inhomogenities in Bayes' rule

14:15 – 14:30 Yohei Sakamoto and Irena Vodenska

Cascading Failure Model and New Perspective on 1990s Japanese Banking Crisis

14:30 – 14:45 Darrell Jiajie Tay, Chung-I Chou, Sai-Ping Li and Siew Ann Cheong

Housing Price Distribution and Housing Bubble

14:45 – 15:00 Teruyoshi Kobayashi and Naoki Masuda

A community-based collective influence algorithm for immunizing networks

15:00 Deadline of Vote for Poster Award

15:00 – 15:30 Coffee break

Session 10 Place:Koshiha hall Chair: Cécile Appert-Rolland

15:30 – 16:00 Katsuhiko Nishinari (Invited)

A Smart Solution for Traffic problems - slower-is-faster strategy and metastable states -

16:00 – 16:30 Rafal Weron (Invited)

New trends in energy market forecasting

16:30 – 17:00 Erika Fille Tupas Legara (Invited)

Data-Driven Urban Systems Modeling towards a Smart City

17:00 – 17:20 Coffee break

Session 11 Place:Koshiha hall Chair: Katsuhiko Nishinari

17:20 – 17:50 Beom-Jun Kim (Invited)

Bipedalism and human body-mass index

17:50 – 18:20 Cécile Appert-Rolland (Invited)

Transport in physical space: the example of pedestrians

19:00 – Banquet Place Yushima Tenmangu

19:00-19:20 Traditional Japanese Music Concert

Friday, August 26

Session 12 Place:Koshiha hall Chair: Takashi Shimada

9:00 – 9:30 Masashi Sugiyama (Invited)

Machine Learning from Weak Supervision

9:30 – 10:00 Henrik Jeldtoft Jensen (Invited)

Dynamics of Transformation from Segregation to Mixed Wealth Cities

10:00 – 10:30 Naoki Masuda (Invited)

Dynamical switching of networks facilitates endemicity in the susceptible-infected-susceptible epidemic model

10:30 – 10:50 Coffee break

Session 13 Place:Koshiba hall Chair: Hideki Takayasu

10:50 – 11:20 Hawoong Jeong (Invited)

Interdisciplinary applications of network dynamics: From microscopic to Macroscopic

11:20 – 11:50 Wei-Xing Zhou (Invited)

Joint multifractal analysis based on the partition function approach: Analytical analysis, numerical simulation and empirical application

11:50 – 12:20 Didier Sornette (Invited)

Growth:

1) Aristotle vs. Ringelmann ($1+1>2.5$): cooperative projects and productivity;

2) multi-scale business cycles;

3) Social bubbles as engines of discovery

12:20 – 12:40 Misako Takayasu and Kenta Yamada

Poster award, Closing

List of Poster Presentation

P-01 Kei Katahira and Yu Chen

Modelling Market Dynamics with a "Market Game"

P-02 Yushi Yoshimura and Kenta Yamada

Delayed Majority Game with Heterogeneous Learning Speeds for Financial Markets

P-03 Tetsuya Takashi

A Large-Scale Simulation of Ising Financial Market

P-04 Arthur M. Y. R. Sousa, Hideki Takayasu and Misako Takayasu

Analysis of the up-down dynamics of the foreign exchange market using statistical symmetries

P-05 Kazuaki Nakayama and Shintaro Mori

Collective behavior of social learning agents in restless multi-armed bandit

P-06 Xiangyi Meng, Jian-Wei Zhang and Hong Guo

A quantum Brownian motion model for stock markets

P-07 Hirofumi Yamashita, Hideki Takayasu and Misako Takayasu

Price and Volume Dynamics in the Stock Market

P-08 Yuta Murakami, Hideki Takayasu and Misako Takayasu

Growth Model of Japanese Inter-firm Trading Network with Money Transport

P-09 Yuh Kobayashi, Hideki Takayasu and Misako Takayasu

Tracking Firm State Variables through Long Time-Series Data of Japanese Firms

P-10 Ayoung Park, Jie Deng, Hyun Son, Solbi Lee and Gabjin Oh

Analysis of connected structure among individual companies

P-11 Emiko Takagi, Kenta Yamada, Hideki Takayasu and Misako Takayasu

Extraction of Abnormal Values of Word Frequencies in the Blogosphere and Influence on Stock Price

P-12 Tomoya Hamano, Kiyoshi Kanazawa, Hideki Takayasu and Misako Takayasu

Dealer model with finite assets in foreign exchange market

P-13 Hideto Kamei, Hideki Takayasu, Yoshiyuki Kabashima, Hirokazu Kawamoto, Hayato Goto, Yuta Murakami and Misako Takayasu

The effect of trade network structure on bankruptcy

P-14 Le Anh Quang, Ashadun Nobi, Jung Nam, Tae Ho Lee and Jae Woo Lee

Hierarchical Organization of World Commodities Flow Network

P-15 Jean-Francois Boilard, Hideki Takayasu, Kiyoshi Kanazawa and Misako Takayasu

Annihilation Rate of Limit Orders in Foreign Exchange Market

P-16 Daichi Yanagisawa and Shingo Ichiki

Hurst exponent in a simple order-book model with the asymmetric simple exclusion process

P-17 Kenji Hara, Hideki Takayasu and Misako Takayasu

Detail observation of interaction among foreign exchange markets based on order-book data

P-18 Takahiro Ezaki, Yutaka Horita, Masanori Takezawa and Naoki Masuda

Reinforcement Learning Explains Conditional Cooperation in Repeated Social Dilemma Games

P-19 Yasuko Kawahata and Takaaki Ohnishi

Study of Quantitative Indicators for Urban Renewal by Utilizing Cultural Policy in Depopulated Areas

P-20 Hisashi Arakaki, Akira Ishii and Yasuko Kawahata

Difference and similarity between Twitter posting and access of web application coupled with television program

P-21 Shintaro Mori, Masato Hisakado and Kazuaki Nakayama

Efficient aggregation of collective intelligence in information cascade voting system

P-22 Poongjin Cho, Sondo Kim, Sungyoon Choi and Woojin Chang

Forecasting the maximum and minimum daily stock price using various prediction methods

P-23 Çağlar Tuncay

Market Laws

P-24 Dunbiao Niu, Xin Yuan, Minhui Du, H. Eugene Stanley and Yanqing Hu

Percolation of networks with directed dependency links

P-25 Yuki Yabuuchi and Kazue Kudo

Traveling Salesman Problems with Constraints

P-26 Taro Takaguchi and Yuichi Yoshida

A pattern-match based method for extracting modules in directed networks

P-27 Masaru Nagura, Katsuhiko Nishinari

Effect on the scale invariance of the network exerted by the constraint of the latency

P-28 Ken Yamamoto

Lognormal behavior of the size distributions of animation characters

P-29 Fumiaki Sano, Masato Hisakado and Shintaro Mori

Voter Model for General Election in Japan

P-30 Jinattaporn Khumsri and Akihiro Fujihara

Finding hidden location patterns of two competitive supermarkets in Thailand

P-31 Wen-Wei Lee, Wei-Chun Hung, Yi-Chin Chou, Yung-Chou Hsu and Chung-I Chou

Using a Simple Model to Simulate the Consensus Formation

P-32 Yoshie Otsuka and Kazue Kudo

Detection of overlapping communities in a friendship network

P-33 Shao-Hsuan Hsiao, Hao Ke, Po-Yu Chien, Wei Dai and Chung-I Chou

Simple Field Experiments for Consensus Formation on Campus

P-34 Yohei Kondo, Hideki Takayasu and Misako Takayasu

Structure of Japanese Inter-firm Multiplex Networks

P-35 Kazuya Inagaki, Yusuke Hara and Masao Kuwahara

An Empirical Analysis on the Structure of Facility Accumulations by Comparison of 8 Cities

P-36 Masato S. Abe and Shin-ichiro Nakayama

Identifying causal relationship in partially deterministic systems from time-series data

P-37 Yosuke Kawasaki, Yusuke Hara and Masao Kuwahara

Construction of real-time traffic state estimation method of a two-dimensional network by data assimilation

P-38 James Irish, Minjae Kim and Seung Ki Baek

Empirical study of Fisher's principle in the Census 2000 of Korea