

NetSci-X 2020 Poster Presentations

Session 1 (Jan 20th, 4:10pm - 5:50pm)

Poster No.	Authors	Title
5	Francesco Pierri, Carlo Piccardi and Stefano Ceri	Revealing disinformation news with a structural comparison of Twitter diffusion networks
6	Alan Ballard	Statistical Community Detection in Temporal Networks
9	Xiaowen Zhong and Ying Fan	The emergence of cooperation in public goods games on signed network
13	Yandong Xiao, Liang Bai and Songyang Lao	Design Directed Network with Optimal Controllability
16	Xiuxiu Zhan, Alan Hanjalic and Huijuan Wang	Information diffusion backbones in temporal networks
17	Eitan Asher and Shlomo Havlin	EEG network synchronization increases with Parkinson's disease stage
18	Sayat Mimar, Mariamo Mussa Juane, Juyong Park, Alberto P. Munuzuri and Gourab Ghoshal	Turing patterns mediated by network topology in homogeneous active systems
19	Masanori Takano and Kenichi Nakazato	A balance between edge- and node-excitation mechanisms realizes the difference of communication systems
21	Fanhui Meng, Haoming Sun, Jiarong Xie, Chengjun Wang, Jiajing Wu and Yanqing Hu	Numerical Preferences on Online Social Networks
27	Milad Abbasiharofteh	Driving forces of invention in European regions: a network approach
28	Yoram Louzoun, Roi Naaman and Keren Cohen	Edge sign prediction based on a combination of network structural topology and sign propagation
29	Yoram Louzoun and Akiva Bruno Melka	Natural Emergence of a Core Structure in Networks via Clique Percolation
30	Yoram Louzoun, Jing Fang and Keren Cohen	Topology of products similarity network for market forecasting
31	Yinzuo Zhou and Jie Zhou	Effective Degree Theory for Awareness and Epidemic Spreading on Multiplex Networks
32	Ivan Smirnov	Association between depression and online social integration
33	Mi Jin Lee, Eun Lee, Byunghwee Lee, Hawoong Jeong, Deok-Sun Lee and Sang Hoon Lee	Uncovering hidden mutual importance in networks via information entropy
34	Chung-Yuan Huang and Wei-Chien-Benny Chin	Hierarchical Arc Type Analysis (HATA) Algorithm: Incorporating Significant Direction Effects to Uncover Arc Strength in Complex Directed Networks
35	Xiaoke Xu, Si-Yuan Liu and Jing Xiao	Sign Prediction by Motif Naive Bayes Model in Online Social Networks
36	Xiaoke Xu, Lin Ding and Jing Xiao	Uncovering the Dependence of Cascading Failures on Network Topology by Constructing Null Models
38	Jing Xiao and Xiaoke Xu	Constructing Real-Life Benchmarks for Community Detection by Rewiring Edges
43	Gabrielli Andrea, Giulio Cimini, Luciano Pietronero, Emanuele Pugliese, Andrea Zaccaria and Aurelio Patelli	Unfolding the innovation network for the development of countries: co-evolution of Science, Technology and Production
48	Jiachen Ye and Peng Ji	System performance metrics on the intra- and inter-clusters coupling balance
51	Tomonori Manabe, Shohei Usui and Kei Nakagawa	Relationship between corporate brand and market value, profitability, characteristics of business network in Japanese B2B markets

52	Xiaolu Jia, Daichi Yanagisawa, Claudio Feliciani and Katsuhiro Nishinari	Estimation of pedestrian evacuation time based on pedestrian flow network considering the variation of fundamental diagram
97	Ryota Kobayashi and Shigeru Shinomoto	Estimating Neural Connectivity from Spike Trains
100	Alberto Aleta, Xiangrong Wang, Yamir Moreno and Dan Lu	Directionality Reduces the Impact of Epidemics in Multilayer Networks
102	Jiawei Yan	Kinetic Uncertainty Relations for the Control of Stochastic Reaction Networks
105	Olivia Sashiko Shirai Reyna, Idalia Flores de la Mota and Katya Rodríguez Vázquez	TOPOLOGICAL ANALYSIS USING COMPLEX NETWORKS: THE MEXICO CITY METRO SYSTEM
106	Eyal Gal, Rodrigo Perin and Idan Segev	Neuron Geometry Underlies Universal Network Features in the Cortex
108	Wataru Souma	Whose paper is #1?
109	Ta-Chou Ng and Jui-Hsiang Lin	Inferring the Causal Structure of Disease Comorbidity Network from Longitudinal Medical Data
110	Kaiqi Zhang, Zinan Lv and Meixue Guo	An Adaptive Networks Model Based on Social Identity Theory
111	Shun Kimura and Koujin Takeda	Improved algorithm for neuronal ensemble inference by Monte Carlo method
112	Demival Vasques Filho and Dion O'Neale	The bipartite structure of social networks
113	Naoya Fujiwara, Takashi Kirimura and Takayuki Hiraoka	Mobility networks and distribution of location-specific nouns in geo-tagged tweets
114	Ruixin Wang and Haoxiang Xia	Analysis on the Generation and Evolution of the Categories of Chinese Wikipedia
115	Akira Ishii and Nozomi Okano	Two dimensional opinion dynamics of real opinion and official stance
117	Shuqi Xu, Manuel S Mariani, Linyuan Lü, Lorenzo Napolitano, Emanuele Pugliese and Andrea Zaccaria	The evolution of firms' technological impact and its predictability
118	Sofia Dokuka, Kate Furman and Alex Furman	Gender imbalance in organization: females contribute to teamwork, while males increase skills
120	Chun-Hsiang Chan, Tzai-Hung Wen, Tzu-How Chu and Jiun-Huei Protty Wu	Characterizing the roles of nodes in the global airline alliance network: Considering structure equivalence and geographic proximity
122	Gakuto Watanabe, Yukie Sano and Hiroki Sayama	Collective attention decay with exogenous event
123	Mikhail Sirenko, Scott Cunningham, Nuno Araujo and Trivik Verma	Disentangling Public Transit Ridership into a Spatiotemporal Geography
124	Xinwei Wang, Guo-Ping Jiang and Xu Wu	Reconstructing topological structures for general weighted complex dynamical networks with incomplete measurements
125	Alexandru Topirceanu, Mihai Udrescu and Radu Marculescu	Complex Networks Antifragility Under Sustained Edge Attack-Repair Mechanisms
126	Matúš Medo, Manuel Sebastian Mariani and Linyuan Lü	Universal patterns in the commenting network of online news articles
130	Patrick Gildersleve, Taha Yasseri and Renaud Lambiotte	Bridging the Floating Gap: How News Events Build Networks of Collective Memory on Wikipedia
131	Tomomichi Nakamura and Toshihiro Tanizawa	Constructing networks for multivariate nonlinear and nonstationary time series
132	Ayumi Ozawa and Hiroshi Kori	Suppression of synchronization in coupled non-identical oscillators by global feedback
133	Hyewon Kim, Hang-Hyun Jo and Hawoong Jeong	Influence of environmental changes on temporal networks
134	Je Ung Song	Effective potential approach to hybrid synchronization transitions
136	Wonjun Choi, K. Choi and B. Kahng	A hybrid percolation transition of scale-free network
137	Yuka Fujiki and Kousuke Yakubo	Identification of fractality by assortativity invariance under renormalization
169	Yang Lou, Guanrong Chen and Lin Wang	Toward Stronger Robustness of Network Controllability: The q-Snapback Network Model
171	Cong Li, Shumin Zhang and Xiang Li	Can multiple social ties help improve human location prediction?
174	Sang-Hwan Gwak and Kwang-Il Goh	Percolation process on signed complex networks
175	Tianlong Fan, Jing Guo and Linyuan Lü	Towards the cycle structures in complex network: A new perspective

180	Yasuko Kawahata	Examination of urban movement tendency using multi-dimensional data considering personal information
181	Yuji Fujita, Yuichi Kichikawa and Yoshi Fujiwara	Local bow-tie structure of the web
182	Diego Fregolent Mendes de Oliveira and Kevin S. Chan	Competition and spreading of low and high quality information in online social networks
186	Akira Matsui	Extracting user traits by decomposing consumption behavior
189	Oriol Artime, Valeria D'Andrea, Riccardo Gallotti and Manlio De Domenico	Unraveling the resilience of online social networks to (the lack of) freedom of speech
191	Dimitri Loutchko	An algebraic formalism for the coarse-graining of functional biochemical networks
196	Shilun Zhang, Matus Medo, Linyuan Lv and Manuel Sebastian Mariani	Anticipators of rising and declining popularity trends in socio-economic systems
199	Elma Demir	"The Future of Work": An Interdisciplinary Study of the Global Structural Transformation
200	Toshihiro Tanizawa	Percolation transition on scale-free networks with strong degree assortativity
202	Fang Zhou, Manuel Mariani and Linyuan Lü	Inferring individual influence and susceptibility in social networks from multiple cascade data
204	Yutaka Kuroki and Takayuki Shiohama	Bootstrap Estimation for Rating Based Network Centrality Measures
205	Satoru Morita, Hiromu Ito and Taro Yamamoto	Basic Reproduction Number of Sexually Transmitted Infections with Mother-to-Child Infection
208	Susumu Nagayama, Sho Izumo, Masahiro Kazama, Kazutaka Inoue, Yuji Uema and Yoshiki Ishikawa	The Signature of the Flow State: Eye-on-Eye Movements
209	Rishabh Kaushal, Shubham Singh and Ponnurangam Kumaraguru	NeXLink: Node Embedding Framework for Cross-Network Linkages Across Social Networks
211	Marcell Nagy and Roland Molontay	Comparing Box-covering Algorithms for Fractal Dimension of Complex Networks
214	Anri Suzuki and Fujio Toriumi	Detecting gullible users on Twitter
215	Sotaro Sada and Yuichi Ikeda	How the value flows through international trade
219	Alessandro Muscoloni and Carlo Vittorio Cannistraci	The trilogy of algorithms for network embedding in the hyperbolic space
220	Alessandro Muscoloni, Claudio Durán and Carlo Vittorio Cannistraci	Latent geometry inspired graph dissimilarities can boost community detection in complex networks

NetSci-X 2020 Poster Presentations

Session 2 (Jan 21th, 4:40pm - 6:20pm)

Poster No.	Authors	Title
53	Ryutaro Hashimoto and Tatsuro Kawamoto	Numerical performance assessment for inference of block models with multiple edge labels
54	Mikaela Irene Fudolig, Takayuki Hiraoka and Hang-Hyun Jo	A temporal network framework for music theory
55	Orsolya Vasarhelyi and Balazs Vedres	Gendered behavior as a disadvantage in open source software development
57	Naoki Maejima, Shohei Usui and Takanori Nishida	Exploring Temporal Pattern of Structural Embeddedness and its Effect on Tie Strength
58	Chihiro Noguchi and Tatsuro Kawamoto	Robustness of spectral clustering for networks with an overlapping community structure
61	Minjun Kim and Hiroki Sayama	The Power of Communities: A Text Classification Model with Automated Labeling Process Using Network Community Detection
63	Riho Kawaguchi, Dachi Yanagisawa and Katsuhiro Nishinari	The influence of variation of processing speed on flow of an assembly line
65	Youjin Lee and Elizabeth Ogburn	Testing for Network and Spatial Autocorrelation
66	Shohei Usui, Naoki Maejima and Takanori Nishida	Who has a lot of effective encounters?
67	Orr Levy, Guy Amit, Dana Vaknin, Tom Snir, Peter Castaldi, Yang-Yu Liu, Haim Cohen, Sol Efroni and Amir Bashan	Loss of gene-to-gene transcriptional coordination unveils the stochastic nature of aging
69	Yukie Sano	Empirical Analysis of Academic Network based on Acknowledgment Statement
71	Kohei Ichikawa, Yuma Kajihara and Kotaro Sakamoto	Local synaptic pruning rule achieving near-optimal network controllability
72	Mariko Ito and Takaaki Ohnishi	Minimum spanning tree of biologically relevant chemical space
75	Masaki Chujyo and Yukio Hayashi	Rewirings by enhancing loops improve network robustness
76	Nanxin Wei, Qing Yao and James Gleeson	Generalised Cascade Condition for Watts Threshold Model on Complex Networks
77	Liang Zhao and Tianyi Peng	An Allometric Scaling for the Number of Representative Nodes in Social Networks
79	Hiroto Kanda and Yukio Hayashi	How to change the generation rule from selfish preferential attachment to cooperative intermediation attachment
80	Radosław Michalski and Michal Weskida	Social Influence Maximization with Time Constraints using Genetic Algorithm
84	Takanori Nishida, Susumu Nagayama, Naoki Maejima and Shohei Usui	Magical Encounters in the Business Card Exchange Networks
86	Paul Expert and Takayuki Nozawa	Blind Source Graph Signal Transform Denoising
91	Marcel Weiss and Sebastian E. Ahnert	Detecting and estimating the community structure of neutral components in the genotype-phenotype map of RNA secondary structure
94	Hiromitsu Goto, Yuji Nakatani and Chikara Funabashi	Learning Community and Online Social Network: Case of Japanese Study Abroad Program
96	Hibiki Taguchi, Tsuyoshi Murata and Xin Liu	BiMLPA : Community Detection in Bipartite Networks by Multi-Label Propagation
98	Genki Ichinose and Hiroki Sayama	Sensitivity and Levy flights in spatial cooperation
140	Fei Yu, Makoto Nirei and Toshiaki Shoji	Formation of Chinese Venture Capital Network
143	Makoto Takeuchi	Epidemic modeling of viral music diffusion
144	Ryoji Sato, Ichiro Sato, Masahiko Kaneko and Takayuki Mizuno	Prediction of Shock Propagation Through Supply Chain with Machine Learning

146	Ken Yamamoto and Takuma Narizuka	Growth of ball-passing networks in football games
147	Fei Ying Kuo and Tzai Hung Wen	Regionalization for Infection Control: A Graph Partitioning Algorithm Considering Regularity of Human Mobility for Delineating Quarantine Zones
148	Joomi Jun and Takayuki Mizuno	Extract Unethical Users in Bitcoin Networks
149	Ollin Langle-Chimal and Nick Cheney	Nonbacktracking community detection algorithm for weighted and directed networks
151	Deokjae Lee, Yongsun Lee and Byoungnam Kahng	Growth of scientific collaborations: emergent of first Betti number in growing simplicial complex
153	Inho Hong, Morgan Frank, Iyad Rahwan, Woo-Sung Jung and Hyejin Youn	Cities recapitulate a universal pathway to innovative economies
154	Jinhyuk Yun, Sejung Ahn and June Young Lee	Relatedness inspired clustering of scientific literatures using direct citations exclusively
155	Juan Carlos Sanchez Herrera and Carolyn Dimitri	Farm2Recipe, Connecting Food Recipes to Local and Organic Products. A Network Science approach.
156	Sakurako Tanida, Ken'Ya Furuta, Kaori Nisikawa, Tetsuya Hiraiwa, Hiroaki Kojima and Masaki Sano	Effect of Volume Exclusion on the Ordered Phase of Collective Motion
157	Masaki Aida, Chisa Takano and Masaki Ogura	On the Fundamental Equation of User Dynamics and the Structure of Online Social Networks
158	Xin Zhang, Jialiang Yu and Gene Stanley	The evolution of the cross-broader venture capital network:1970–2018
159	Chisa Takano and Masaki Aida	Universality of Nodal Degree Correlation in Twitter Follower Relationships
160	Jinha Park, Sudo Yi, K. Choi, Deokjae Lee and Byungham Kahng	Interevent time distribution, burst, and hybrid percolation transition
161	Luca Gallo, Francesco Parino, Michele Tizzoni and Paolo Bajardi	Assessing the impact of travel guidances in Florida during the 2016 Zika outbreak through digital traces
163	Jongshin Lee and Byungham Kahng	Betweenness centrality distribution based on research teams in a co-authorship simplicial complex.
164	Hoyun Choi, Jinha Park and B. Kahng	Interevent time distribution in abrupt percolation transition
165	Kota Takeda, Masato Hisakado and Shintaro Mori	How to collect private signals in information cascade : an empirical study
221	Alessandro Muscoloni and Carlo Vittorio Cannistraci	A nonuniform popularity-similarity optimization (nPSO) model to efficiently generate realistic complex networks with communities
222	Toshimichi Wakabayashi and Yasuko Kawahata	Examination of approach to opinion distribution on Web media in large-scale relay event using stochastic process
225	Yuma Takeuchi, Tomomi Kito and Junichi Yamanoi	Trademark network analysis for investigation of name-branding strategies
230	Muhammad Mohsin Hakeem	Startups Going Public: A Rare Sight in Japanese Financial Markets
231	Nicolo Pagan, Wenjun Mei and Florian Dorfler	Emergence of scaling on the followers of social media influencers
232	Carolina Mattsson, Shafique Jamal, Soren Heitmann and Guy Stuart	Quantifying the circulation of money within digital payment systems
233	Michael Wilsher, Carl P. Dettmann and A.J. Ganesh	Connectivity of 1-dimensional Soft Random Geometric Graphs
234	Marco Cogoni, Giovanni Busonera and Gianluigi Zanetti	Percolation transition in simulated urban traffic
235	Suman Acharyya, Baruch Barzel and Reuven Cohen	Real-time mitigation of the propagation of perturbations on complex networks
236	Elohim Reis, Aming Li and Naoki Masuda	Human dynamics as a mixture of Poisson processes
237	Demival Vasques Filho and Dion O'Neale	Latent space generative model for bipartite networks
238	Jason Bassett, Maksim Kitsak and Igor Linkov	Role Interplay and Information Distortion on Command and Control Structures
240	Flavio Iannelli and Manuel Sebastian Mariani	Ranking nodes at and above criticality
241	Jun Ohnuki and Mitsunori Takano	Allosteric pathway in protein explored by Ising machine

244	Alexander P. Becker and Irena Vodenska	Systemic Risk Underestimation in Reconstructed Networks
250	Saptarshi Ghosh and Sarika Jalan	Taming chimera state using heterogeneous delays
251	S J Pevzner and C L Motuzas	The Hidden Network: Radiology in Patient-Physician Interactions
252	Rodrigo Dorantes-Gilardi, Hiram Hernández-Ramos and Jesús Espinal-Enríquez	Eight years of crime evolution in the city of Monterrey under a network approach
255	Byungjoon Min and Claudio Castellano	Searching for an influential spreader in mutually cooperative coinfections
258	Paulo McMiller, Juliana Angeiras Batista da Silva and Ricardo Luiz Longo	Investigation of liquid water behavior with complex networks analysis
259	Ivana Bachmann, Francisco Sanhueza and Javier Bustos-Jiménez	Space geometry effect over the Internet as a physical-logical interdependent network
260	Yanchen Liu	Pattern emergence in networks via diffusion processes
261	Kishore Vasan, Carl Bergstrom and Jevin West	Should granting agencies actively engage in co-funding?
269	Lewis Mitchell, Tobin South and Matthew Roughan	Cast size, social networks, and success, in the Marvel Cinematic Universe
270	Mark He, Shankar Bhamidi, Joey Glasser and Nikhil Kaza	Intertemporal Community Detection in Bikeshare Networks
271	Hartle, Papadopolous and Krioukov	Evolving Hidden-Variable Network Ensembles
273	Lucas Almeida	Spatial Contagion of Mass Shootings in the USA
274	Priodyuti Pradhan and Sarika Jalan	Localizing Principal Eigenvector in Multilayer Networks
275	Orr Levy, Yoed Kenett and Shlomo Havlin	Identifying the interactions between phonology and semantics using a multiplex network approach
276	Hirofuka Fukushima and Tomomi Kito	Road-Railway Detour Index for multimodal transportation networks
277	Malayaja Chutani and Neelima Gupte	Study of overlaps in scientific collaboration networks
278	Emily Harvey and Dion O'Neale	Using network science to quantify economic disruptions in regional input-output networks
279	Yuma Aoki, Jun Kitazono and Masafumi Oizumi	Bi-directionally connected cores of causal networks in the brain