Poster Session

*All posters will be displayed for 2 days from Wednesday, June 1 to Thursday, June 2.

P1 **Contagion of Cooperation in a Donation Game Played on Chain Networks**
Yutaka Horita[1,2], Masanori Takezawa[3], Takuji Kinjo[3], Yo Nakawake[3], and Naoki Masuda[4]
[1]*Nat'l Institute of Informatics, Japan,* [2]*JST, ERATO, Japan,* [3]*Hokkaido Univ., Japan,* [4]*Univ. of Bristol, UK*

P2 **Impacts of Climate Change and Human Activity on Nestedness and Modularity of Food Webs and Mutualistic Networks**
Kazuhiro Takemoto and Kosuke Kajihara
Kyushu Institute of Technology, Japan

P3 **The Time-Varying Relation between Social Networks and Bank Loyalty**
Sümeyra Atmaca[1], Koen Schoors[1], and Marijn Verschelde[3]
[1]*Ghent Univ., Belgium,* [2]*IÉSEG School of Management, France*

P4 **Rendezvous of Heterogeneous Multi-Agent Networks via Event-Driven Control**
Bin Hu[1], Zhi-Hong Guan[1], Ming Chi[1], Ding-Xin He[1] and Xiao-Hui Li[2]
[1]*Huazhong Univ. of Science and Technology, China,* [2]*Wuhan Univ. of Science and Technology, China*

P5 **Predicting Plant Cell Divisions using 3D Cell Interaction Networks**
Matthew D. B. Jackson[1], Soeren Strauss[2], Alexander T. Topham[1], Daniel Kierzkowski[2], Thomas Montenegro-Johnson[3], Richard S. Smith[2], and George W. Bassel[1]
[1]*Univ. of Birmingham, UK,* [2]*Max Planck Institute for Plant Breeding Research, Germany,* [3]*Univ. of Cambridge, UK*

P6 **Finding Communities by their Centers**
Yan Chen[1], Pei Zhao[1], Ping Li[1], Kai Zhang[2], and Jie Zhang[3]
[1]*Southwest Petroleum Univ., China,* [2]*NEC Laboratories America, Inc., USA,* [3]*Fudan Univ., China*

P7 **Network of Air Quality Monitoring Stations in Malaysia**
Fatimah Abdul Razak, Sakhinah Abu Bakar, Muhammad Nazirul Aiman Abu Supian, and Norsuhaili Mahamed Rasidi
Universiti Kebangsaan Malaysia, Malaysia

P8   **Risk Propagation of venture Capital Market: Dynamic Network Approach**
Xin Zhang[1,3], Ning Hu[1]. Yonatan. Berman[2], and H. E. Stanley[3]
[1]Shanghai Maritime Univ., China, [2]Tel-Aviv Univ., Israel, [3]Center for Polymer Studies, USA

P9   **Transformation within Eurozone's Investment Network**
Muhammad Mohsin Hakeem and Ken-ichi Suzuki
Tohoku Univ., Japan

P10   **A General Algorithm of Generating Multiplex Networks based on Shared Links**
Yinzuo Zhou[1] and Jie Zhou[2]
[1]Hangzhou Normal Univ., China, [2]East China Normal Univ., China

P11   **Transformations within G8 and GCC Trade Networks**
Muhammad Mohsin Hakeem
Tohoku Univ., Japan

P12   **Scaling Properties of Dynamical Fluctuations in Temporal Networks**
Liping Chi and Chunbin Yang
Central China Normal Univ., China

P13   **Efficient Network Disintegration under Incomplete Information: the Comic Effect of Link Prediction**
Suo-Yi Tan[1], Jun Wu[1,2], Linyuan Lu[3,4], Meng-Jun Li[1], and Xin Lu[1,5]
[1]Nat'l Univ. of Defense Technology, China, [2]Univ. of California Davis, USA, [3]Hangzhou Normal Univ., China, [4]Univ. of Electronic Science and Technology of China, China, [5]Karolinska Institutet, Sweden

P14   **Looking Far Into the Social Groups' Future**
Stanislaw Saganowski, Piotr Bródka, Tomasz Kajdanowicz, and Tomasz Kajdanowicz
Wrocław Univ. of Technology, Poland

P15   **A Comparative Analysis of Community Detection Algorithms on Artificial Networks**
Zhao Yang, René Algesheimer, and Claudio J. Tessone
Univ. of Zürich, Zürich, Switzerland

P16   **The Transition Point in the Analysis of Chinese Multilayer Air Transport Networks**
Jian Jiang[1], J. H Han[2], R. Zhang[1], and W Li[2]
[1]Wuhan Textile Univ., China, [2]Central China Normal Univ., China

P17 **Optimal Inter-Connections for Spectral Radius of Interdependent Complex Networks: a Perturbation Approach**
Huashan Chen[1], Shouhuai Xu[2], and Wenlian Lu[3]
[1]Chinese Academy of Sciences, China, [2]Texas Univ. at San Antonio, USA, [3]Fudan Univ., China

P18 **Measuring the Robustness of Link Prediction Algorithms under Noisy Environment**
Peng Zhang[1], Xiang Wang[1], Futian Wang[1], An Zeng[2], and Jinghua Xiao[1]
[1]Beijing Univ. of Posts and Telecommunications, China, [2]Beijing Normal Univ., China

P19 **The Reconstruction of Complex Networks with Community Structure**
Peng Zhang[1], Futian Wang[1],
Xiang Wang[1], An Zeng[2], and Jinghua Xiao[1]
[1]Beijing Univ. of Posts and Telecommunications, China, [2]Beijing Normal Univ., China

P20 **Systemic Risk in Dynamic Economic Systems**
Qingmin Hao[1] and Jinlu Li[2]
[1]Tianjin Univ., China, [2]Shawnee State Univ., USA

P21 **Consensus Speed Optimisation with Finite Leadership Selection in Weighted k-Outdegree Networks**
Ruaridh Clark, Giuliano Punzo, Kristaps Baumanis, and Malcolm Macdonald
Univ. of Strathclyde, UK

P22 **Effect of Network Structure on Social Information Spread**
Ho June Cha, Nam June Cha, Ji Young Kim, and Junseok Hwang
Seoul Nat'l Univ., Korea

P23 **Decentralized Fixed Modes of Networked MIMO Systems**
Yuqing Hao and Zhisheng Duan
Peking Univ., China

P24 **Effect of the Initially Infected Node on the Spreading Time in SIS Epidemics**
Zhidong He and Piet Van Mieghem
Delft Univ. of Technology, The Netherlands

P25 **Narratives as Unfolding Dynamical Networks and Mapping of the Interaction Dynamics via Topical States**
Semi Min and Juyong Park
KAIST, Korea

P26   **A New Weighted Degree Centrality Measure: the Application in an Animal Disease Epidemics.**
Candeloro Luca, Savini Lara, and Conte Annamaria
Istituto Zooprofilattico Sperimentale dell'Abruzzo e del Molise ''G. Caporale'', Italy

P27   **SIS Epidemic Spreading with Heterogeneous Infection Rates**
Bo Qu and Huijuan Wang
Delft Univ. of Technology, The Netherlands

P28   **Network of Popular Aongs based on Non-Musical Extrinsic Properties: Its Wffect on the Songs' Success**
Seungkyu Shin and Juyong Park
KAIST, Korea

P29   **A Network Model of Honey Bee Colony Population Dynamics**
Weibing Deng
Central China Normal Univ., China

P30   **Influence Maximization via a Generalized Degree Discount Heuristics**
Xiaojie Wang, Chengli Zhao, Xue Zhang, Xiaojun Duan, and Dongyun Yi
Nat'l Univ. of Defense Technology, China

P31   **Application of Complex Networks to the Management Domain: the Case of Organizational Activity**
Christos Ellinas[1,2], Neil Allan[2], and Anders Johansson[1]
[1]Univ. of Bristol, UK, [2]Bradford-on-Avon, UK

P32   **Genealogical Trees of Scientific Papers**
Micha•el Waumans and Hugues Bersini
Ecole Polytechnique de Bruxelles - ULB, Belgium

P33   **Interaction Patterns in Diabetes Mellitus II network: An RMT relation**
Aparna Rai, Alok Yadav, Sanjiv K. Dwivedi, and Sarika Jalan
Indian Institute of Technology, India

P34   **Exploring Truss Structure in Directed Networks**
Taro Takaguchi[1,2] and Yuichi Yoshida[1,3]
[1]Nat'l Institute of Informatics, Japan, [2]Japan Science and Technology Agency, Japan, [3]Preferred Infrastructure, Inc., Japan

P35 **Jamming Transition of the Traffic Model with Heterogeneous Node Capacity on the Scale-Free Network**
Woosik Choi, Yup Kim, and Soon-Hyung Yook
Kyung Hee Univ., Korea

P36 **Understanding the Origin of Criticality in Meme Popularity Distribution using Position Eependent Biased Random Walk**
Seokjong Park, Soon-Hyung Yook, and Yup Kim
Kyung Hee Univ., Korea

P37 **Configuration Network Constructed from Two-Dimensional Ising Model**
Hye Jin Park and Beom Jun Kim
Sungkyunkwan Univ., Korea

P38 **Navigation by Anomalous Random Walks on Complex Networks**
Tongfeng Weng and Pan Hui
Hong Kong Univ. of Science and Technology, China

P39 **Inferring Parent-Child Links in Online Social Networks**
Xiao-Ke Xu
Dalian Minzu Univ., China

P40 **Network Effects in Team Assembly and Crime Ideation in Criminal Co-Offender Networks**
Petter Holme[1] and Yukie Sano[2]
[1]Sungkyunkwan Univ., Korea, [2]Univ. of Tsukuba, Japan

P41 **Identifying Causal Networks from Time-Series Data of Noise-Driven Dynamics**
Masato S. Abe[1,2] and Shin-ichiro Nakayama[3]
[1]Nat'l Institute of Informatics, Japan, [2]Japan Science and Technology Agency, Japan, [3]Nat'l Research Institute of Fisheries Science, Japan

P42 **Withdrawn**

P43 **Analysis and Improvement of Vehicle Information Sharing Networks**
Hang Gong, Zhiren Huang, and Chengcheng Wang
Central South Univ., China

P44 **Withdrawn**

P45   **Locating Traffic Information Sources in Transportation Networks**
Chengcheng Wang, Hang Gong, and Zhiren Huang
Central South Univ., China

P46   **Canary in a Coal Mine - Analysis of Systemic Risk**
Gabjin Oh[1], Hyeongsop Shim[2], and Yong-Cheol Kim[3]
[1]Chosun Univ., Korea, [2]UNIST, Korea. [3]Univ. of Wisconsin-Milwaukee, USA

P47   **Spatial-Temporal Networks in Epidemics: Comparing Network Clustering Patterns of Transmission and Common-Origin Structures**
Fei-Ying Kuo and Tzai-Hung Wen
Nat'l Taiwan Univ., Taiwan

P48   **Locating Multi Source of Large-Scale Social Networks based on Sub-Graph Extraction**
Xizhe Zhang[1], Yubo Zhang[1], Tianyang Lv[2,3], and Bin Zhang[1]
[1]Northeastern Univ., China, [2]Harbin Engineering Univ., China, [3]Nat'l Audit Office, China

P49   **Discovering Important People in Facebook using Rule Learning**
Fredrik Erlandsson[1], Piotr Bródka[2], Anton Borg[1], and Henric Johnson[1]
[1]Blekinge Institute of Technology, Sweden, [2]Wrocław Univ. of Technology, Poland

P50   **Chimera Revisited : Impact of Multiplexing**
Saptarshi Ghosh, Aradhana Singh, and Sarika Jalan
Indian Institute of Technology Indore, India

P51   **Do Community Detections Methods Yield Better Label Space Division than Random Partitioning for Multi-Label Classification?**
Piotr Szymański [1,2] and Tomasz Kajdanowicz[1]
[1]Wrocaw Univ. of Technology, Poland, [2]Illimites Foundation, Poland

P52   **Scikit-Multilearn: Python environment for Multi-Label Classification with Community Detection based Label Space Division**
Piotr Szymański[1,2]
[1]Wroclaw Univ. of Technology, Poland, [2]Illimites Foundation, Poland

P53   **Co-Evolution of Growth and Dynamics on Network**
Guillaume St-Onge, Edward Laurence, Charles Murphy, Jean-Gabriel Young, and Louis J. Dubé
Université Laval, Canada

P54   **The Computational Hardness of dK-Series**
William E. Devanny, David Eppstein, and Bálint Tillman
Univ. of California, Irvine, USA

P55   **Usefulness of the Fama and French Three-Factor Model in Shanghai A-Share Market**
Gabjin Oh, Jie Deng, and Ayoung Park
Chosun Univ., Korea

P56   **Simulated Graph for Benchmarking Community Detection in Bipartite Networks**
Jun Jin Choong and Tsuyoshi Murata
Tokyo Institute of Technology, Japan

P57   **The Source of Systemic Risk in International Equity Market**
Gabjin Oh, Ayoung Park, and Jie Deng
Chosun Univ., Korea

P58   **Leveraging Layers Aggregation for Community Detection in Multiplex Networks**
Ralucca M. Gera[1], Ryan E. Miller[1], and Akrati Saxena[2]
[1]Naval Postgraduate School, USA, [2]Indian Institute of Technology, India

P59   **Node Centrality in Networks with both Cooperative and Conflict Link**
Dongfeng Tan, Jiayi Sun, Yaohong Zhang, and Baohong Liu
Nat'l Univ. of Defense Technology, China

P60   **Pricing Effects on Usability: Examining the Network Structure of Bike Sharing Program Before and After Introducing a New Pricing Policy**
Chen-Shuo Hong and Chieh-Ting Tsai
Nat'l Taiwan Univ., Taiwan

P61   **A Knowledge-based Methodto Detect Essential Proteins by Integrating DIP with STRING**
Yuanyuan Sun, Yawen Guan, Jundong Yan, Zhihao Yang, Jian Wang, Hongfei Lin, and Shaowu Zhang
Dalian Univ. of Technology, China

P62   **Generalizing Relatedness Measures Derived from Language Networks using Small World Walks**
Simon De Deyne[1], Dan Navarro[2], Amy Perfors[1], and Gert Storms[3]
[1]Univ. of Adelaide, Australia, [2]UNSW, Australia, [3]Univ. of Leuven, Belgium

P63   **Analyzing the Urban Street Networks of Korea**
Byoung-Hwa Lee and Woo-Sung Jung
POSTECH, Korea

P64   **Portfolio Investment Network and Economy: The case of EU**
Muhammad Mohsin Hakeem and Ken-ichi Suzuki
Tohoku Univ., Japan

P65   **Spectrum of Controlling and Observing Complex Networks**
Gang Yan[1], Georgios Tsekenis[1], Baruch Barzel[2], Jean-Jacques Slotine[3], Yang-Yu Liu[4], and Albert-László Barabási[1]
[1]Northeastern Univ., USA, [2]Bar-Ilan Univ., Israel, [3]MIT, USA, [4]Harvard Medical School, USA

P66   **Quantifying Uncertainty in Network Regressions**
Bailey K. Fosdick[1], Tyler H. McCormick[2], and Frank W. Marrs[1]
[1]Colorado State Univ., USA, [2]Univ. of Washington, USA

P67   **Distributed Control of Complex Networked Systems with Directed Communication Topology**
Yuezu Lv, Zhongkui Li, and Zhisheng Duan
Peking Univ., China

P68   **Similarity Distribution Approach for Link Prediction under Random Deletion Process**
Min-Woo Ahn and Woo-Sung Jung
POSTECH, Korea

P69   **Information Propagation in Clustered Multilayer Networks**
Yong Zhuang and Osman Yağan
Carnegie Mellon Univ., USA

P70   **Large Scale Network Measures Computation using Distributed Computational Model in Comparison to Centralized Methods**
Roman Bartusiak and Tomasz Kajdanowicz
Wroclaw Univ. of Technology, Poland

P71   **Extended Totally Asymmetric Simple Exclusion Process with Langmuir Kinetics on a Network**
Daichi Yanagisawa and Shingo Ichiki
The Univ. of Tokyo, Japan

P72   Structural Patterns in World Mythology and Folklore
Hyunuk Kim[1], Marcus J. Hamilton[2,3], Woo-Sung Jung[1], and Hyejin Youn[2,4,5]
[1]POSTECH, Korea, [2]Santa Fe Institute, USA, [3]Arizona State Univ., USA, [4]Oxford Martin School, UK, [5]Univ. of Oxford, UK

P73   Effect of Activity and Memory on Temporal Networks
Hyewon Kim[1], Meesoon Ha[2], and Hawoong Jeong[1]
[1]KAIST, Korea, [2]Chosun Univ., Korea

P74   Navigating Adversarial Knowledge Networks: The Effects of Player Skill on Team Assembly Strategies in Multiplayer Online Battle Arena Games
Brian C. Keegan[1], Jooyeon Kim[2], and Alice Oh[2]
[1]Harvard Univ., USA, [2]KAIST, Korea

P75   Quantifying Failure Dependencies in Multi-Layer Mobile Broadband Networks
Dong Zhou, Džiugas Baltrūnas, and Ahmed Elmokashfi
Simula Research Laboratory, Norway

P76   Bridging the Gap – a Unifying Approach to Proximity on Networks
Kenneth S. Berenhaut, Peter S. Barr, and Alyssa M. Kogel
Wake Forest Univ., USA

P77   Graphlet Analysis of Global City Street Networks
Garvin Haslett[1], Seth Bullock[2], and Markus Brede[1]
[1]Univ. of Southampton, UK, [2]Univ. of Bristol, UK

P78   Formation of Network and Group Intimacy
Kibum Kim, Woo Seong Jo, and Beom Jun Kim
Sungkyunkwan Univ., Korea

P79   Unraveling the Network Structures of Neocortical Microcircuitry: Hubs, Motifs, Small World and E/I Ratios
Eyal Gal[1], Amir Globerson[2], Mickey London[1], Eilif Muller[3], Michael Reimann[3], Henry Markram[3], and Idan Segev[1]
[1]The Hebrew Univ., Israel, [2]Tel Aviv Univ, Isarel, [3]École Polytechnique Fédérale de Lausanne, Switzerland

P80   Extracting Hierarchical Organization of Communities in Networks by Series of Phase Transitions Induced by Quasi-Static Increase in Resolution
Qiu Xu-le[1] and Hiroshi Okamoto[1,2]
[1]Fuji Xerox, Co., Ltd., Japan, [2]RIKEN Brain Science Institute, Japan

P81 **Withdrawn**

P82 **A Sociosemantic Account of Artistic Communities: Structural Position and Involvement in Meaning Making**
Ju-Sung Lee[1], Nikita Basov[2], and Artem Antoniuk[2]
[1]Erasmus Univ. Rotterdam, The Netherlands, [2]St. Petersburg State Univ. - Bielefeld Univ., St., Russia

P83 **A new Network Generation Model based on Multilayer Network**
Chao Fan and Fujio Toriumi
The Univ. of Tokyo, Japan

P84 **Research on Geo-Relationship Network and the Competing (or Mutually Beneficial) Relationship Network of Textile Enterprises in China**
Jie Liu, Jian Jiang, Qunjiao Zhang, and Hui Zhou
Wuhan Textile Univ., China

P85 **Dynamics of Uncertain and Conflicting Opinions in Social Networks**
Jin-Hee Cho and Ananthram Swami
US Army Research Laboratory, USA

P86 **Cyber War Game in Temporal Networks**
Jin-Hee Cho[1] and Jianxi Gao[2]
[1]US Army Research Laboratory, USA, [2]Northeastern Univ., USA

P87 **Cooperation Prediction based on Github Developers Network**
Roman Bartusiak and Tomasz Kajdanowicz
Wroclaw Univ. of Technology, Poland

P88 **Community Detection by using Laser Network**
Hiromasa Sakaguchi[1,2], Shuhei Tamate[2], Yoshihisa Yamamoto[3], and Shoko Utsunomiya[2]
[1]The Univ. of Tokyo, Japan, [2]Nat'l Institute of Informatics, Japan, [3] Japan Science and Technology Agency, Japan

P89 **Cooperative Spreading Diseases with Mobile Agents**
Jorge P. Rodríguez[1], Fakhteh Ghanbarnejad[2], and Víctor M. Eguíluz[1]
[1]Palma de Mallorca, Spain, [2]Technische Universität Berlin, Germany

P90 **Superhero Social Networks**
Pédraig Mac Carron and James Carney
Univ. of Oxford, UK

P91 **Nucleation Theory Meets Network Science**
Jan Kulveit and Pavel Demo
Academy of Sciences of the Czech Republic, Czech Republic

P92 **Musical Collaboration Networks**
Pádraig MacCarron
Univ. of Oxford, UK

P93 **Research and Application of Algorithm for Isomorphism Determination of Graphs based on Circuit Simulation Method**
Huiliang Shang
Fudan Univ., China

P94 **Network Structure of Fission-Fusion of African Rebel Groups**
Koji Oishi
The Univ. of Tokyo, Japan

P95 **How to Control a Firm's Reputation in a Globalized Economy**
Yan Zhang, Antonios Garas, and Frank Schweitzer
ETH Zurich, Switzerland

P96 **Network based Quality Prediction on Wikipedia**
Rajmund Kleminski[1], Tomasz Kajdanowicz[1], Roman Bartusiak[1], Radosaw Nielek[2], and Adam Wierzbicki[2]
[1]Wroclaw Univ. of Technology, Poland, [2]Polish-Japanese Academy of Information Technology, Poland

P97 **Modeling Common-Interest Social Networks through Composite Graphs**
Rashad Eletreby and Osman Yağan
Carnegie Mellon Univ., USA

P98 **Withdrawn**

P99 **Recovering the Einstein-Hilbert Action from Lorentzian Random Geometric Graphs**
Will Cunningham
Northeastern Univ., USA

P100   **Knowledge Spillovers through Patent Inventor Sharing in Regional Biopharma Research**
Greg Morrison and Fabio Pammolli
IMT Lucca School for Advanced Studies, Italy

P101   **Sentiment Analysis using Community Detection in Big Unlabeled Corpora**
Lukasz Augustyniak and Tomasz Kajdanowicz
Wroclaw Univ. of Technology, Poland

P102   **Lexicon-based Ensemble Classification for Sentiment Analysis**
Lukasz Augustyniak, Piotr Szymański, Tomasz Kajdanowicz, and Roman Bartusiak
Wroclaw Univ. of Technology, Poland

P103   **Multiplex Network Growth with Finite Budgets**
Kevin Chan and Ananthram Swami
US Army Research Laboratory, USA

P104   **Representing Higher-Order Dependencies in Networks**
Jian Xu, Thanuka Wickramarathne, and Nitesh Chawla
Univ. of Notre Dame, USA

P105   **Steady State Phenomena and Percolation in Sandpile Diffusion Processes**
Prithwish Basu and Feng Yu
[1] Raytheon BBN Technologies, USA, [2]City Univ. of New York, USA

P106   **Targeting a Dark Network in a Multiplex Social Network**
Ralucca M. Gera and Scott Warnke
Naval Postgraduate School, USA

P107   **Ever Expressed Genes and Topology of Gene Regulatory Networks**
Chenping Zhu[1,2], Jing Zhao[3], Chuanyang Yin[4], Xiliang Peng[1], and Huijie Yang[5], Wen-Hsiung Li[6], and Chin-Kun Hu[5,6,7]
[1]Nanjing Univ.of Aeronautics and Astronautics, China, [2]Kavli Institute of Theoretical Physics, China, [3]Logistical Engineering Univ., China, [4]Nanjing Univ. of Information Science and Technology, China, [5]Univ. of Shanghai for Science and Technology, China, [6]Academia Sinica, Taiwan, [7]Nat'l Tsing Hua Univ., Taiwan

P108   **Network Dimensions in the Dallas Museum of Art**
Maximilian Schich
The Univ. of Texas at Dallas, USA

P109   **Location-based Network Model**
Kosuke Shinoda
The Univ. of Electro-Communications, Japan

P110   **Grand-Canonical Validation of Bipartite Networks**
Fabio Saracco[1], Riccardo Di Clemente[2], Andrea Gabrielli[1,3], and Tiziano Squartini[1]
[1]IMT School for Advanced Studies, Italy, [2]MIT, USA, [3]Sapienza Univ. of Rome, Italy

P111   **A Disease Centrality Identifies Multi-System Proteinopathy Disease Genes**
Marc Santolini[1,2,3,] Brett Winborn[4], Shikang Liu[1], Hong Joo Kim[4], J Paul Taylor[4], and Amitabh Sharma[1,3]
[1]Harvard Medical School, USA, [2]Northeastern Univ., USA., [3]Dana-Farber Cancer Institute, USA

P112   **Dynamical Analyses in Four Financial Stock Markets**
Kyungsik Kim[1] and Seungsik Min[2]
[1]Pukyong Nat'l Univ., Korea, [2]Korea Naval Academy, Korea

P113   **Quantifying Wikipedia: Massive History of Online Open-Editing Encyclopedia**
Jinhyuk Yun[1], Sang Hoon Lee[2], and Hawoong Jeong[1,3]
[1]KAIST, Korea, [2]KIAS, Korea, [3]APCTP, Korea

P114   **Privacy and Social Capital in Online Social Networks**
Jin-Hee Cho[1], Izzat Alsmadi[2], and Dianxiang Xu[3]
[1]US Army Research Laboratory, USA, [2]Univ. of New Haven, USA, [3]Boise State Univ., USA

P115   **Political Inclination and Opinion Spread in Presidential Elections**
Woo Seong Jo and Beom Jun Kim
Sungkyunkwan Univ., Korea

P116   **Homophily and Legislative Co-Authorship: New Evidence from Ukraine**
Tymofii Brik[1] and Ostapchuk Dmytro[2]
[1]Univ. of Carlos III, Spain. [2]VoxUkraine, Ukraine

P117   **Molecular Network of Obesity and Its Induced Diseases**
Jaisri Jagannadham, Hitesh Kumar Jaiswal, Stuti Agrawal, and Kamal Rawal
Jaypee Institute of Information Technology, India

P118   **Combination of Tit-for-Tat and Anti-Tit-for-Tat Remedies Problems of Tit-for-Tat**
Su Do Yi[1], Seung Ki Baek[1], and Jung-Kyoo Choi[2]
[1]Pukyong Nat'l Univ., Korea, [2]Kyungpook Nat'l Univ., Korea

P119 **Vulnerability of Structural Brain Network for Simulation of Neurodegeneration in Sleep Deprivation**
Min-Hee Lee[1], Youngjin Lee[2], Yoon Ho Hwang[1], Areum Min[1], Bong Soo Han[2], and Dong Youn Kim[1]
[1]Yonsei Univ., Korea, [2]Eulji Univ., Korea

P120 **Power Difference in Power-Grid System**
Mi Jin Lee and Beom Jun Kim
Sungkyunkwan Univ., Korea

P121 **A Traffic Reliability Index based on Percolation Theory**
Limiao Zhang[1,2], Guanwen Zeng[1,2], and Daqing Li[1,2]
[1]Beihang Univ., China, [2]Science and Technology on Reliability and Environmental Engineering Laboratory, China

P122 **Competition Between Layers in Multiplex Complex Networks based on Local Optimization**
Jiuhua Zhao[1,2] and Xiaofan Wang[1,2]
[1]Shanghai Jiao Tong Univ., China, [2]Ministry of Education of China, China

P123 **Cascading Failures by Fluctuating Loads in Scale-Free Networks**
Kousuke Yakubo[1] and Shogo Mizutaka[2]
[1]Hokkaido Univ., Japan, [2]The Institute of Statistical Mathematics, Japan

P124 **Network Evolution and Understanding Human Gene-Phenotype Relationship**
Seong Kyu Han, Donghyo Kim, and Sanguk Kim
POSTECH, Korea

P125 **Robustness of the Metabolic Networks: The Impact of Enzymatic Gene Expression**
Gyeong-Gyun Ha[1] and Deok-Sun Lee[2]
[1]Nat'l Meteorological Satellite Center, Korea, [2]Inha Univ., Korea

P126 **Measuring Systemic Risk with the Revealed Correlation Network using Markov-Switching Multifractal Model**
Jisang Lee and Duk Hee Lee
KAIST, Korea

P127 **Q-Coloring and Generalized Conserved-Lattice Gas on Random Networks**
Wooseop Kwak, Sojeong Park, and Meesoon Ha
Chosun Univ., Korea

P128   Withdrawn

P129   Effect of Network Architecture on Sparsely Synchronized Brain Rhythms in A Scale-Free Neural Network
Sang-Yoon Kim[1] and Woochang Lim[2]
[1]*Institute for Computational Neuroscience, Korea,* [2]*Daegu Nat'l Univ. of Education, Korea*

P130   Rapid Improvement of Robustness to Existing Networks without Optimal Algorithms
Genki Ichinose[1], Yoshiki Satotani[2], and Toshihiro Tanizawa[3]
[1]*Shizuoka Univ., Japan,* [2]*Anan College, Japan,* [3]*Kochi College, Japan*

P131   A Novel Approach to Evaluate Community Detection Algorithms on Ground Truth
Giulio Rossetti[1,2], Luca Pappalardo[1,2], Salvatore Rinzivillo[2], and Fosca Giannotti[2]
[1]*Univ. of Pisa, Italy,* [2]*ISTI-CNR, Italy*

P132   Structural Transition of Financial Network Around Global Financial Crisis
Ashadun Nobi[1,2], Nam Jung[1], Tae Ho Lee[1],   Le Anh Quang[1], and Jae Woo Lee[1]
[1]*Inha Univ., Korea,* [2]*Noakhali Science and Technology Univ., Bangladesh*

P133   Effects of Dimensionality and Heterogeneity on the Fluctuation in Complex Networks
Hyung-Ha Yoo and Deok-Sun Lee
Inha Univ., Korea

P134   Hierarchy and Modularity, the Two Organizing Mechanisms of Protests in SNS: the Case study of Rainbow Occupy Seoul City Hall and Smokestack Protest of Ssangyong Motor's Dismissed Workers
Donghyun Kang
Seoul Nat'l Univ., Korea

P135   Exploitation Competition in Plant-Pollinator Mutualistic Networks
Seong Eun Maeng, Jae Woo Lee, and Deok-Sun Lee
Inha Univ., Korea

P136   Percolation Transition on Multiplex Lattices
Jeehye Choi[1], Byungjoon Min[2], and K. -I. Goh[1]
[1]*Korea Univ., Korea,*   [2]*City College of New York, USA*

P137   **The Influence of Heterogeneous Threshold in Opinion Dynamics**
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