The 15th International Workshop on Complex Systems and Networks (IWCSN 2018)

Program

19-23 October 2018 Nanjing·China

Sponsors

Jiangsu Provincial Key Laboratory of Networked Collective Intelligence and School of Mathematics at the Southeast University, China

Centre for Chaos and Complex Networks, City University of Hong Kong, China

Jiangsu Engineering Laboratory for Internet of Things and Intelligent Robotics, China

Chinese Institute of Command and Control, China

Conference site: Nanjing Shijiyuan International Conference Center

Website： http://nci.seu.edu.cn/wome/list.htm

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General Information

The 2018 IWCSN will be the 15th International Workshop in the successful series of events organized consecutively in Qatar (2017), Atlanta (2016), Perth (2015), Shanghai (2014) etc. (IWSCN Home: http://iwcsn.eie.polyu.edu.hk). This series of conferences has been held annually since 2004, and now it has become a premier international workshop in the areas of complex systems and networks.

International workshop on complex systems and networks (IWCSN) aims to provide a high-level international forum for scientists, engineers, and educators to present the state of the art of research and applications in complex systems and networks. In particular, it focuses on topics including but not limited to:

- complex systems and complex networks
- multi-agent systems
- networked control and optimization
- systems biology
- sensor networks
- communication networks
- neural networks
- cyberspace security
- smart grids
- intelligent transportation systems
- complex systems applications.

The conference features invited speeches given by world renowned scholars, regular sessions with broad coverage.

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Program Schedule

October 19				
Time		**Proceeding**		
13:00-20:00		Registration(October 19 13:00-22:00 Hotel lobby; October 20 08:30-17:30 Baihe Hall 百合厅: The 3rd Floor in Shijiyuan Hotel)		
17:00-20:00		Dinner		
October 20 （Baihe Hall 百合厅: The 3rd Floor in Shijiyuan Hotel）				
Time	**Host**	**Speaker**	**Organization**	**Title**
9:00-9:40		Jinde Cao/Wenwu Yu: Welcome/Group Photo		
9:40-10:20	Guanrong Chen	Philip Chen	University of Macau, Macau China	Minimum Agent-Movement Leader-Follower Persistent Formation for Switching Topologies
10:20-10:40		Coffee/Tea Break		
10:40-11:20	Guoping Jiang Xiang Li	Michael C. K. Tse	Hong Kong Polytechnic University, Hong Kong China	Analysis of Daily Rainfall Data in China from 1961-2011 and Application to Prediction
11:20-12:00		Zengqiang Chen	Nankai University, China	Similarity and Measures of Complex Networks
12:00-14:00		Lunch Buffet (B1 **in Shijiyuan Hotel**)		
14:10-14:50	Bertrand Roehner	Zengru Di	Beijing Normal University, China	Characterizing the Researcher's Features by Network Analysis
14:50-15:30		Xiaofan	Shanghai University & Shanghai Jiaotong	Edge Consensus on Networked Systems

	Guanghui Wen	Wang	University, China	
15:30-15:50		Coffee/Tea Break		
15:50-16:30	Qingshan Liu	Ivan W.H. Ho	Hong Kong Polytechnic University	Complex Network Analysis of Public Transport Networks
18:00		Dinner		
October 21（Baihe Hall 百合厅：The 3rd Floor in Shijiyuan Hotel ）				
Time	**Host**	**Speaker**	**Organization**	**Title**
9:00-9:40	Jianquan Lu	Jürgen Kurths	Potsdam Institute for Climate Impact Research and Humboldt University Berlin, Institute of Physics, Germany	Predictability of Extreme Climate Events via a Complex Network Approach
9:40-10:20		Zhihong Guan	Huazhong University of Science and Technology, China	Introduction to Hybrid Intelligent Networks
10:20-10:40		Coffee/Tea Break		
10:40-11:20	Jinling Liang	Jie Sun	Clarkson University, USA	Optimal Causation Entropy Principle and Entropic Regression for Nonlinear System Identification under Large Noise and Outliers
11:20-12:00		Jinhu Lü	Beihang University & Chinese Academy of Sciences, China	Evolutionary Dynamics and Control of Complex Networks

12:00-14:00		Lunch Buffet (B1 **in Shijiyuan Hotel**)		
14:00-18:00		Discussion		
18:00		Dinner		
October 22 （ Baihe Hall 百合厅 ：The 3rd Floor in Shijiyuan Hotel ）				
Time	**Host**	**Speaker**	**Organization**	**Title**
9:00-9:40	Junjie Fu Yuezu Lv	David John Hill	The University of Hong Kong, Hong Kong China	Power Network Science
9:40-10:20		Ljiljana Trajkovic	School of Engineering Science,Simon Fraser University, Canada	Machine Learning Algorithms for Detection of Network Intrusions
10:20-10:40		Coffee/Tea Break		
10:40-11:20	Duxin Chen	Ljupco Kocarev	St. Cyril and Methodius University	Collaboration/cooperation in Groups of Agents
11:30-14:00		Lunch Buffet (B1 **in Shijiyuan Hotel**)		
14:00-16:00		Discussion		
18:00		Dinner		

Lecture 1

Title：Minimum Agent-Movement Leader-Follower Persistent Formation for Switching Topologies

Speaker：Philip Chen

Abstract：This talk presents generation strategy, motion control law, and switching topologies of a novel leader-follower relation-invariable persistent formation (RIPF), which is a kind of distance-based directed formation for multi-agent systems (MASs). An efficient algorithm is designed to find out if a persistent formation can be generated from a rigid graph. Derived from the properties of a rigid graph, an algorithm to generate a RIPF from any initial location is presented. With the selected minimum agent-movement RIPF, lastly, a control law is designed to drive this initial RIPF to the desired RIPF with given distances among agents. A neural network-based adaptive dynamic surface control (NDSC) is introduced to solve mission trajectory tracking problems. Simulation results show the proposed generative method, control law, and downward-tree are effective to realize the desired formation.

Short Bio： Dr. Chen is currently Dean and Chair Professor of the Faculty of

Science and Technology, University of Macau. His research areas are in systems, cybernetics and computational intelligence. He is a Fellow of the IEEE, AAAS, and IAPR. He was the President of IEEE Systems, Man, and Cybernetics Society (SMCS) (2012-2013), where he also has been a distinguished lecturer for many years and received Outstanding Service Awards 4 times. Currently, he is the Editor-in-Chief of IEEE Transactions on Systems, Man, and Cybernetics: Systems (2014-) and an Associate Editor of IEEE Trans on Fuzzy Systems, IEEE Trans on Cybernetics, and IEEE/CAA Automatica Sinica. In March 2018, he is listed in world top 14 having the most highly cited paper in computer science area by WoS; and listed as a Highly Cited Researcher in Computer Science area by Clarivate Analytics. He is also a Fellow of CAA and Fellow of HKIE and a member of Academia Europea and IASCYS. He received IEEE Norbert Wiener Award in 2018 for his research contribution in systems, cybernetics, and machine learning.

Lecture 2

Title： Analysis of Daily Rainfall Data in China from 1961-2011 and Application to Prediction

Speaker： Michael C. K. Tse

Abstract： This talk presents an analysis of our newly developed rainfall (daily precipitation) data in China from 1961-2011 and some prediction. The data set was constructed from 3825 measurement sites over the entire China and up to 0.5deg x 0.5deg latitude-longitude grid. Using this data set, we found highly consistent fit of the data with a specific distribution function, which we call Impulse Weibull Distribution as it has an origin from the Weibull Distribution. Some clear trends can be identified from the rainfall data in different parts of China over the past 50 years, and we use common Machine Learning methods to perform prediction. The perfect fitting of Impulse Weibull Distribution has provided a strong tool for prediction and can dramatically reduce the data size needed for making prediction to the same accuracy as that using the complete data set. Machine learning using regression tree methods will be applied to perform effective rainfall prediction.

Short Bio： Prof. Michael Tse is Chair Professor at the Hong Kong Polytechnic

University. He works in nonlinear systems, networks and power electronics. He serves and has served as Editor-in-Chief of IEEE Transactions on Circuits and Systems II, IEEE Circuits and Systems Magazine, IEICE Nonlinear Theory and Applications. He has been appointed to honorary professorship and distinguished fellowship by a few Australian, Canadian and Chinese universities, including the Chang Jiang Scholar Chair with Huazhong University of Science and Technology. Some information about his work can be found in http://cktse.eie.polyu.edu.hk. He is an IEEE Fellow and an IEAust Fellow.

Lecture 3

Title： Similarity and Measures of Complex Networks

Speaker： Zengqiang Chen

Abstract： Network measurements are essential as a direct or subsidiary resource in many network investigations (representation, characterization, classification and modeling). In this talk we will focus on the topic of network similarity measures, properties and applications, we firstly start outlining the problem of measuring the structural similarity between graphs. Then, we define novel similarity measures and prove that they possess desired and useful properties. Also we outline some applications and give a summary and conclusion.

Short Bio： Zengqiang Chen received his BS degree in Mathematics, his MS

degree and his PhD degree in Automatic Control from Nankai University of China in 1987, 1990, and 1997 respectively. Now, he is a full professor of the Department of Automation, Nankai University. His main research interest is on chaos, complex networks, multi-agent systems, model based predictive control (MPC), nonlinear system control. He has authored and co-authored over 300 journal papers.

Lecture 4

Title： Characterizing the Researcher's Features by Network Analysis

Speaker： Zengru Di

Abstract： Many high quality scientific publication databases have provided us remarkable opportunities for deep understanding of the evolution of science and technology. Using approaches from complex networks and statistical physics, many emergent phenomena have been identified. Examples include the spatial-temporal patterns of researchers' mobility and collaboration, the universal distribution of paper citation across different disciplines, and the collapse of the citation evolution of different papers, and so on. Here we will present some preliminary results about quantifying the dynamics of scientists' research activities using the APS database and network analysis.

Short Bio： Professor Zengru Di is now the Dean of the School of Systems Science, Beijing Normal University, the Leader of Discipline Appraisal Group on Systems Science of the Academic Degree Committee of the State Council, People's Republic of China (2009-present), Vice President of the Systems Engineering Society of China. His research interests rely on the area of the Complex Systems, Complex Networks, Self-organization Theory and its application in socio-economic and biological systems.

Lecture 5

Title： Edge consensus on networked systems

Speaker： Xiaofan Wang

Abstract： This talk focuses on the design of distributed edge interacting protocols to achieve edge consensus on a networked system, which try to drive the states of all edges to a common state. We provide sufficient conditions for edge consensus and analyze the influence of network structure on edge consensus. Then, we investigate both nonnegative and positive edge consensus problems, and analyze edge quasi-consensus with edge state constraints or input saturation.

Short Bio：Xiaofan Wang received the Ph.D. degree from Southeast University, China in 1996. He has been a Professor in the Department of Automation, Shanghai Jiao Tong University (SJTU) since 2002 and a Distinguished Professor of SJTU since 2008. He is now vice-president of Shanghai University. He received the 2002 National Science Foundation for Distinguished Young Scholars of P. R. China, the 2005 Guillemin-Cauer Best Transactions Paper Award from the IEEE Circuits and Systems Society, the 2008 Distinguished Professor of the Chaing Jiang Scholars Program, Ministry of Education, China. His current research interests include analysis and control of complex dynamical networks. He is currently the Chair of the IFAC Technical Committee on Large-Scale Complex Systems, Steering committee member of the IEEE Transactions on Network Science and Engineering (TNSE), Board member of the international Network Science Society (NetSci) and Chair of the Chinese Technical Committee on Complex Networks and System Control.

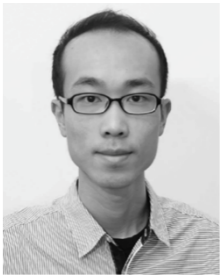
Lecture 6

Title： Complex Network Analysis of Public Transport Networks

Speaker： Ivan W.H. Ho

Abstract： A graph, comprising a set of nodes connected by edges, is one of the simplest yet remarkably useful mathematical structure for the analysis of real-world complex systems. Network theory, being an application-based extension of graph theory, has been applied to a wide variety of real-world systems involving complex interconnection of subsystems. The application of network theory has permitted in-depth understanding of the connectivity, topologies and operations of many practical networked systems as well as the roles the various parameters play in determining the performance of such systems. In the field of transportation networks, however, the use of graph theory has been relatively much less explored, and this motivates us to bring together the recent development in the field of public transport analysis from a graph theoretic perspective.

Short Bio： Ivan Wang-Hei Ho is currently an Assistant Professor at the



Department of Electronic and Information Engineering, The Hong Kong Polytechnic University. He received the B.Eng. and M.Phil. degrees in Information Engineering from The Chinese University of Hong Kong, and the Ph.D. degree in Electrical and Electronic Engineering from Imperial College London, UK. He primarily invented the MeshRanger series wireless mesh embedded system, which won the Silver Award in Best Ubiquitous Networking at the Hong Kong ICT Awards 2012. Ivan is an Associate Editor for IEEE Access and IEEE Transactions on Circuits and Systems II, and TPC member for IEEE conferences (ICC, WCNC, PIMRC, etc.). His research interests are in vehicular ad-hoc networks (VANET), intelligent transportation systems (ITS), Internet of things (IoT), as well as complex networks and systems.

Lecture 7

Title： Predictability of Extreme Climate Events via a Complex Network Approach

Speaker： Jürgen Kurths

Abstract： We analyse climate dynamics from a complex network approach. This leads to an inverse problem: Is there a backbone-like structure underlying the climate system? For this we propose a method to reconstruct and analyze a complex network from data generated by a spatio-temporal dynamical system. This approach enables us to uncover relations to global circulation patterns in oceans and atmosphere.

This concept is then applied to Monsoon data; in particular, we develop a general framework to predict extreme events by combining a non-linear synchronization technique with complex networks. Applying this method, we uncover a new mechanism of extreme floods in the eastern Central Andes which could be used for operational forecasts. Moreover, we analyze the Indian Summer Monsoon (ISM) and identify two regions of high importance. By estimating an underlying critical point, this leads to a substantially improved prediction of the onset of the ISM.

Short Bio： Jürgen Kurths is currently a Professor of nonlinear dynamics with

the Humboldt University of Berlin, Germany. He is currently the Chair of the Research Domain Transdisciplinary Concepts with the Potsdam Institute for Climate Impact Research, Potsdam, Germany. He has authored over 650 papers with H-factor 71. His current research interests include complex networks, synchronization, and time series analysis. He is a fellow of the American Physical Society and a member of the Academia Europaea. He is an Editor-in-Chief of Chaos, and a member on the editorial board of other journals.

Lecture 8

Title： Introduction to Hybrid Intelligent Networks

Speaker： Zhihong Guan

Abstract： With the development of brain science and intelligent systems in recent years, neural networks and artificial intelligence have never been more encouraging. The human brain has endowed us marvelous abilities such as perception, recognition, learning, decision-making, problem-solving, etc. Thanks also to the conceptual and technical advances in neural networks and artificial robots, the study of brain science has been enriched with more powerful methods and stronger tools. The integration of biological systems and man-made engineering systems states very early, and has never been more indispensable. The advent of brain-inspired intelligence is an authentic evidence for such integrated research. A great deal of scientists and engineers nowadays contribute to fundamental principles and interesting discoveries in the fields of brain science and neural networks. Nonetheless, more efforts are needed to develop a full understanding of what the brain structure is and how the brain functions, and to further map these real structural and functional information into design effective, more natural (more brain-inspired) intelligence.

Short Bio： Zhi-Hong Guan received the Ph.D. degree in automatic control

theory and applications from the South China University of Technology, Guangzhou, China, in 1994. In 1994, he was a Full Professor with Jianghan Petroleum Institute, Jingzhou, China. Since 1997, he has been a Full Professor with Huazhong University of Science and Technology, Wuhan, China, where since 2011 he has been a Huazhong Leading Professor. His research interests include complex systems and complex networks, impulsive and hybrid control systems, networked control systems, multiagent systems, networked robotic systems, complex smart grids, neural networks, and genetic regulatory networks.

Lecture 9

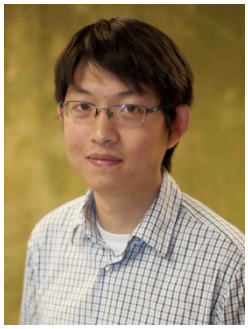
Title : Optimal Causation Entropy Principle and Entropic Regression for Nonlinear System Identification under Large Noise and Outliers

Speaker : Jie Sun

Abstract : System identification (SID) is central in science and engineering applications whereby a general model form is assumed, but active terms and parameters must be inferred from observations. Virtually all existing methods for SID optimize some metric-based cost function that describes how a model fits observational data. The most common cost function employs a Euclidean metric and leads to a least squares estimate, while recently it is popular to also account for model sparsity such as in compressed sensing and Lasso methods. While the effectiveness of these methods has been demonstrated in various model systems, it remains unclear whether SID can be accomplished under more realistic scenarios where there may be large noise and outliers.

Here we show that sparsity-focused methods such as compressive sensing, when used in the presence of noise, may result in ``over sparse'' solutions that are brittle to outliers. In fact, metric-based methods are prone to outliers because outliers by nature have an unproportionally large influence. To mitigate such issues of large noise and outliers encountered in practice, we utilize our recent framework for causal network inference—optimal causation entropy, to develop an entropic regression approach for nonlinear SID, whereby true model structures are identified based on relevance in reducing information flow uncertainty, not necessarily sparsity. The use of information-theoretic measures as opposed to a metric-based cost function has a unique advantage, due to the asymptotic equipartition property of probability distributions, that outliers and other low-occurrence events are naturally and intrinsically de-emphasized.

Short Bio： Dr. Jie Sun is an Associate Professor of Mathematics at Clarkson University, USA. Prior to joining Clarkson in July 2012, Dr. Sun was a postdoc at Northwestern University and Princeton University, respectively. Dr. Sun received his B.Sc in Physics and B.Ec in Finance from Shanghai Jiao Tong University in 2006, and PhD in Mathematics from Clarkson University in 2009. Dr. Sun has broad research interests in the theme of complex systems and data science, including specific topics such as causal network inference, sensor network localization, control and synchronization of complex networks. He has published over forty journal articles, including several in Physical Review Letters, Physical Review X, and SIAM Journal on Applied Dynamical Systems. He has been an active referee for numerous journals, and is currently an Associate Editor of the journal Chaos and also the journal Mathematics in Science and Industry.



Lecture 10

Title： Evolutionary Dynamics and Control of Complex Networks

Speaker： Jinhu Lü

Abstract： Evolutionary dynamics and control play a fundamental role in exploring the underlying mechanism of collective behaviors for complex networks. Traditionally, evolutionary dynamics focus on the analysis of evolutionary behaviors of unstructured complex systems. However, recent research reveals that system structure is essential importance for the formation of collective behaviors. This talk shows the intrinsic relation between structure and function of a complex networks with evolutionary dynamics.

Short Bio： Jinhu Lü is a Distinguished Professor and the Dean of School

of Automation Science and Electrical Engineering, Beihang University, China. He is also a Professor of AMSS, Chinese Academy of Sciences. He was a Professor in RMIT University, Australia and a Visiting Fellow in Princeton University, USA.

Currently, Prof. Lü is a Chief Scientist of National Key Research and Development Program of China and a Leading Scientist of Innovative Research Groups of National Natural Science Foundation of China. He has published numerous journal papers in the fields of complex networks, nonlinear circuits and systems, and Big Data. He is an ISI Highly Cited Researcher in Engineering (2014, 2015, 2016, 2017). Prof. Lü served as a member in the Fellows Evaluating Committee of IEEE CASS, IEEE IES, and IEEE CIS. He served and is serving as Editors in various ranks for 15 SCI journals, including the Co-Editor-in-Chief of IEEE TII and Associate Editor for 7 IEEE Transactions: TCAS-I, TCAS-II, TBioCAS, TNN, TIE, TII, TSMC-Syst. Prof. Lü is also the General Co-Chair of the 43rd Annual Conference of the IEEE Industrial Electronics Society (IECON 2017) and Program Co-Chair of the 9th Asian Control Conference (ASCC 2013).

Prof. Lü received the prestigious Ho Leung Ho Lee Foundation Award in 2015, the State Natural Science Award three times in 2008, 2012, and 2016 respectively, and the Australian Research Council Future Fellowships Award in 2009. Moreover, he was awarded a National Natural Science Fund for Distinguished Young Scholars and a Leading Scientist of Ten Thousand Talents Program of China. He is also an IEEE Fellow and CAA Fellow.

Lecture 11

Title： Power Network Science

Speaker： David John Hill

Abstract： The talk will review power system theory by merging two viewpoints. Firstly and more recently, the network science viewpoint, which exploits the structural features of the power grid (or networks); and secondly, the dynamical systems viewpoint, which emphasises the nonlinear dynamics. It appears that the whole of the nearly 100-year old subject of power systems can be rewritten in the dynamical networks paradigm to provide new insights. Recent work in this line from engineering and science researchers has given new life to the theoretical basics of power networks, particularly in the areas of stability and distributed control. These contributions including those of the speaker will be presented.

Short Bio： David J. Hill holds the Chair of Electrical Engineering at The University of Hong Kong. He is also a part-time Professor in the Centre for Future Energy Networks at The University of Sydney. He has held academic and substantial visiting positions at several universities including Australian National, California (Berkeley), Hong Kong (City, Polytechnic), Lund (Sweden), Munich (TUM), Newcastle (Australia), Melbourne, Sydney as well as with NICTA, Australia. Prof. Hill is a Life Fellow of IEEE, Fellow the Society for Industrial and Applied Mathematics, the Australian Academy of Science, the Australian Academy of Technological Sciences and Engineering, and the Hong Kong Academy of Engineering Sciences. He is also a Foreign Member of the Royal Swedish Academy of Engineering Sciences.

Lecture 12

Title： Machine Learning Algorithms for Detection of Network Intrusions

Speaker： Ljiljana Trajkovic

Abstract： Detecting, analyzing, and defending against network intrusions is an important topic in cyber security. Various detection systems have been designed using machine learning techniques that help detect malicious intentions of network users. We apply various machine learning algorithms to classify known network intrusions. The developed models are trained and tested using the NSL-KDD dataset containing information about intrusion and regular network connections. The algorithms are used to classify various types of intrusion classes and regular data and are compared based on accuracy and F-Score. Performance results indicate that the BLS algorithm shows comparable performance with shorter training time.

Short Bio： Ljiljana Trajkovic received the Dipl. Ing. degree from University of

Pristina, Yugoslavia, in 1974, the M.Sc. degrees in electrical engineering and computer engineering from Syracuse University, Syracuse, NY, in 1979 and 1981, respectively, and the Ph.D. degree in electrical engineering from University of California at Los Angeles, in 1986. She is currently a Professor in the School of Engineering Science at Simon Fraser University, Burnaby, British Columbia, Canada. Her research interests include high-performance communication networks, control of communication systems, computer-aided circuit analysis and design, and theory of nonlinear circuits and dynamical systems. Dr. Trajkovic´ served as 2007 President of the IEEE Circuits and Systems Society. She was Chair of the IEEE Technical Committee on Nonlinear Circuits and Systems (1998). She served as an Associate Editor of the IEEE Transactions on Circuits and Systems (Part I) (2004– 2005 and 1993–1995), the IEEE Transactions on Circuits and Systems (Part II) (1999–2001 and 2002–2003), and the IEEE Circuits and Systems Magazine (2001–2003). She is a Fellow of the IEEE.

Lecture 13

Title： Collaboration/cooperation in groups of agents

Speaker： Ljupco Kocarev

Abstract： This talk addresses two related topics: collaborative ensemble learning in statistical learning theory and cooperation in social dilemmas. Marquis of Condorcet (1785) shown that if each voter is more likely (> 0.5) to vote correctly, then adding more voters increases the probability that the majority decision is correct. This has triggered various ensemble methods for improving the predictive performance of (weak) learning algorithms, in another words, for “garnering wisdom from a council of fools”. Algorithmic stability will be utilized to design collaborative ensemble methods in order to reduce generalization error for both binary classifiers and Gaussian conditional random field models. Thus, “collaborative fools could generate even more wisdom”.

Short Bio： Ljupco Kocarev is a member of the Macedonian Academy of

Sciences and Arts, IEEE Fellow, a Full Professor with the Faculty of Computer Science and Engineering, Ss. Cyril and Methodius University in Skopje, Macedonia, the Director of the Research Center for Computer Science and Information Technologies, Macedonian Academy of Sciences and Arts, and a Research Professor with the University of California at San Diego. His work has been supported by the Macedonian Ministry of Education and Science, NSF, AFOSR, DoE, ONR/ONR Global, NIH, STMicroelectronics, NATO, TEMPUS, FP6, FP7, Horizon 2020, DAAD, and DFG. He has co-authored over 150 journal papers in 30 different international journals, ranging from mathematics to physics and from electrical engineering to computer sciences. His scientific interests include networks, nonlinear systems and circuits, dynamical systems and mathematical modeling, and computational biology.

Conference Information

Conference site

Nanjing Shijiyuan International Conference Center is located in the scenic Baijia Lake in Jiangning Development Zone. The environment is elegant and the scenery is pleasant. The hotel has a business area of more than 20,000 square meters. Its catering has more than 80 luxurious private rooms and 8 luxurious banquet halls. More than 200 rooms are uniquely designed and equipped with various supporting facilities. The viewing balcony rooms and oil painting themed rooms brings more relaxation and pleasure. There is also a sauna club in the hotel's garden, and there is an elegant Western restaurant, which is a good place for your taste, elegance and relaxation. Nanjing Shijiyuan International Conference Center warmly welcomes you to stay!

Hotel Address: 1680 Shuanglong Avenue, Jiangning District, Nanjing (next to Baijiahu Square, Jiangning Development Zone)

Transportation

Annotation：The above is the traffic map around the conference site.

Surrounding traffic		
Nanjing South Railway Station	**6.9 km from the hotel**	**Walk to Nanjing South Railway Station, take the subway line 1 South Extension Line (direction of China Pharmaceutical University), get off at Baijiahu Station and walk about 360 meters. Take a taxi for about 20 yuan.**
Xinjiekou	**14.57 km from the hotel**	**Walk to Xinjiekou Station, take the subway line 1 South Extension Line (direction of China Pharmaceutical University), get off at Baijiahu Station and walk about 360 meters. Take a taxi for about 39 yuan.**
Nanjing Railway Station	**19.15 km from the hotel**	**Take the subway line 1 South Extension Line (direction of China Pharmaceutical University), get off at Baijiahu Station and walk about 360 meters. Take a taxi for about 53 yuan.**
Nanjing Lukou International Airport	**26.33 km from the hotel**	**Take Airport Bus line 2, get off at Zhonghuamen Long-distance Bus Terminal, change to the South Extension Line of metro Line 1 (direction of China Pharmaceutical University), get off at Baijiahu Station and walk about 360 meters. Take a taxi for about 70 yuan.**