

The 29th Chinese Control Conference (CCC 2010)

The Chinese Control Conference (CCC) is an annual conference on systems and control theory and its applications. The Technical Committee on Control Theory (TCCT) of the Chinese Association of Automation (CAA) is the permanent sponsor of the CCC. Information on current and past CCCs can be found on the Web site of the TCCT at <http://tcct.amss.ac.cn>. The 29th CCC was held at the National Convention Center of China, Beijing, on July 28–31, 2010. The Beijing Institute of Technology was the local sponsor of CCC 2010 and was responsible for the local organization of CCC 2010. The conference was also cosponsored by Academy of Mathematics and Systems Science of the Chinese Academy of Sciences, the IEEE Control Systems Society (CSS), the Institute of Control, Robotics and Systems (ICROS), Korea, the IEEE CSS Singapore Chapter, the IEEE CSS Hong Kong Chapter, the IEEE CSS Beijing Chapter, Tsinghua University, Peking University, and

Beijing University of Aeronautics and Astronautics. The conference attracted over 1200 attendees, including 52 from outside Mainland China.

THE TECHNICAL PROGRAM

There were 2633 submissions to CCC 2010, including 86 papers from outside of Mainland China, including Australia, Canada, France, Hong Kong, Japan, Singapore, South Korea, Sweden, Taiwan, the United Kingdom, and the United States. From these submissions, 1191 papers were accepted and included in the conference proceedings. The rate of acceptance was 45%. The *Proceedings of the 29th CCC* will be included in the IEEE Conference Publication Program with the IEEE catalog number CFP0840A.

There were 89 parallel oral sessions, 15 of which were invited, and four poster sessions. Among the accepted papers, 883 were presented in the conference, 492 were in oral sessions, and the rest were in poster sessions. Six of the oral sessions were English sessions, where all papers were represented in English. Pa-

pers in other sessions could be presented either in English or in Chinese.

Six plenary speeches on timely topics were delivered. These speeches were “Approaches to Identification of Nonlinear Systems,” by Lennart Ljung, Department of Electrical Engineering, Linköping University, Sweden; “Trend of the Artillery Rocket and Problems Related to Control,” by Shuxing Yang, Beijing Institute of Technology, China; “Extremum Seeking—60 Years of Adaptive Control,” by Iven Mareels, the University of Melbourne, Australia; “Randomized Algorithms for Design of Uncertain Complex Systems,” by Roberto Tempo, National Research Council of Italy (CNR) at the research institute IEIIT, Italy; “Well-Posedness and Regularity of Partial Differential Control Systems,” by Bao-Zhu Guo, Chinese Academy of Sciences, China; and “Research and Development of Unmanned Rotorcraft Systems,” by Ben M. Chen, Department of Electrical and Computer Engineering, National University of Singapore.

These plenary sessions were chaired by Lei Guo, Daizhan Cheng,

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The opening ceremony of the 29th CCC held in Beijing, on July 28–31, 2010. More than 1200 people attended the conference.



The opening ceremony of CCC 2010.



Lei Guo presents the Guan Zhao-Zhi Award.



Hongxin Wu presents the Poster Paper Award.

Zhong-Ping Jiang, Shuzhi Sam Ge, Yingming Jia, and Qianchuan Zhao, respectively.

AWARDS

Three awards were presented at CCC 2010: the 16th Guan Zhao-Zhi Award, the 5th Poster Paper Award, and the 1st TCCT Outstanding Contribution Award. Two papers received the 16th Guan Zhao-Zhi Paper Award: "Controllability of Quasilinear Parabolic Equations and Application," by Xu Liu, from Northeast Normal University, China, and "Mean Square Stabilizability of Linear Systems with Limited Feedback Data Rates and Markovian Packet Losses," by Keyou You and Lihua Xie, from Nanyang Technological University, Singapore. Two papers received the 5th Poster Paper Award: "Identification of Ballistic Parameters Based on Virtual Ballistic Trajectory Data from Firing Tables," by Fang Deng, Jie Chen, and Yongqiang Bai, from Beijing Institute of Technology, China, and "Simplified



Han-Fu Chen presents the TCCT Outstanding Contribution Award.

Algorithm of the Transition Relation in the Hybrid System Verification," by Min Fang, Hui Li, Laibao Luo, and Yashun Zhang, from Hefei University of Technology, China. The recipients of the 1st TCCT Outstanding Contribution Award were Lin Huang of Beijing University, Huashu Qin from Chinese Academy of Science, and Dazhong Zheng from Tsinghua University, for their academic achievements and long-term contributions to the TCCT.

PANEL DISCUSSIONS

Two plenary panel discussions were held. The panel "Challenges and Opportunities for Control in China" was organized and moderated by Guangren Duan, Harbin Institute of Technology. The panelists were Chenghong Wang, Division of Automation, National Natural Science Foundation of China; Hongxin Wu, Beijing Institute of Control Engineering, Lin Huang, Peking University; and Xiaohong Guan, Xi'an Jiaotong University and



Roberto Tempo presents his plenary speech "Randomized Algorithms for Design of Uncertain Complex Systems."



Bao-Zhu Guo gives his plenary speech "Well-Posedness and Regularity of Partial Differential Control Systems."



Ben M. Chen presents his plenary speech "Research and Development of Unmanned Rotorcraft Systems."



Shuxing Yang presents his plenary speech "Trend of the Artillery Rocket and Problems Related to Control."



Iven Mareels presents his plenary speech "Extremum Seeking—60 Years of Adaptive Control."



Lennart Ljung presents his plenary speech "Approaches to Identification of Nonlinear Systems."



A poster session in progress.



Student volunteers at work.

Hong Chen, Jilin University. The panel "Frontiers in Systems and Control Research" was organized and moderated by Ben M. Chen, National University of Singapore. The panelists were Gang Feng, City University of Hong Kong; Zhong-Ping Jiang, Polytechnic Institute of New York University, United States; Tielong Shen, Sophia University, Japan, and Zi-Dong Wang, Brunel University, United Kingdom. Many questions, especially from graduate students and young researchers, were raised and discussed. These questions included how to improve research

skills, how to find suitable research topics, and the outlook for research in controls. The panelists offered many thoughtful views.

PRECONFERENCE WORKSHOPS

Preconference workshops, organized by Zhong-Ping Jiang and Shaoyuan Li, were held in the Graduate School Building, Beijing Institute of Technology. Three frontier research topics were presented: "Analysis and Design of Networked Control Systems," by Lihua Xie, Nanyang Technological University; "Data-Driven Methods

for Dynamic Modeling, Control, and Monitoring" by Biao Huang, University of Alberta; and "Optimization, Scheduling, and Decision Making" by Jian-Bo Yang, University of Manchester, United Kingdom, Jie Chen, Beijing Institute of Technology, Chengbin Chu from Ecole Centrale Paris, Dongling Xu, the University of Manchester, United Kingdom, and Hongwei Wang, Huazhong University of Science and Technology. The invited speakers presented recent developments in their research areas and provided valuable advice for young researchers.



Conference dinner at the Beijing Institute of Technology.



Conference dinner at the National Convention Center of China.



The TCCT meeting held during the conference.



An oral session in progress.

SOCIAL EVENTS

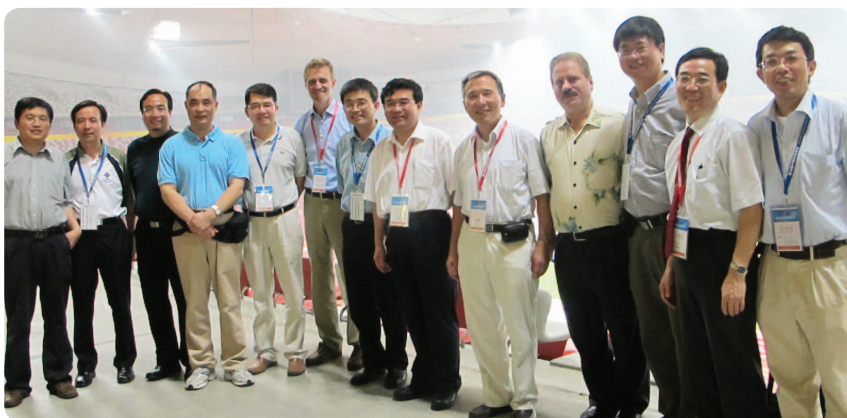
More than 130 student volunteers served on the conference committee. They offered assistance and hospitality throughout the conference venue, at the registration site, hotel, meeting rooms, opening and closing receptions, and tea breaks. The attendees enjoyed Chinese food at the conference dinners at the Beijing Institute of Technology, the National Convention Center of China, and the Bird's Nest, respectively. Many attendees brought their families to visit the modern city offering ancient tourist attractions, including the Great Wall, the Forbidden City, the Temple of Heaven, the Olympic venues, and shopping malls.

CLOSING REMARKS AND INVITATION TO CCC 2011

The success of the conference is due to the efforts of many people, including the attendees, authors, and members of the conference committees. A 106-member program committee undertook the job of advertising the conference, handling papers for review, compiling the final program, and editing the book of abstracts and the proceedings. Eight program regional chairs were responsible for promoting the conference within their respective regions and for organizing invited sessions. These chairs were Tongwen Chen, University of Alberta, Canada; Wanquan Liu, Curtin University of Technology, Australia; Gary G. Feng, Hong Kong City University; Guoping Liu, University of



Yantai International Conference Center, Venue of the 2011 CCC.



Conference attendees at the Bird's Nest.



More conference attendees at the Bird's Nest.



Conference dinner hosted by the TCCT at the Bird's Nest, the main stadium of the 2008 Olympic Games.

Glamorgan, United Kingdom; Zongli Lin, University of Virginia, United States; Tielong Shen, Sophia University, Japan; and Lihua Xie, Nanyang

Technological University, Singapore. A 65-member organizing committee successfully completed the task of local arrangements.

The next CCC will be held on July 22–24, 2011 in Yantai, a seaside city located along the northeast coast of China, famous for its beautiful scenery. At the closing ceremony of CCC 2010, Peijin Wang, general secretary of CCC 2011, reported the progress of the preparation work for next CCC and extended a warm invitation to colleagues all over the world to participate. More information on CCC 2011 can be found at the conference Web site <http://ccc11.ytu.edu.cn/wz/index.html>.

Jie Chen

Program Chair

Zongli Lin

U.S. Regional Chair

Yanlong Zhao

Vice General Secretary of TCCT

The 25th Youth Automation Conference of the Chinese Association of Automation

The 25th Youth Automation Conference (YAC) of the Chinese Association of Automation (CAA) took place August 20–22, 2010, in Fushun City, Liaoning Province, P.R. China. This conference series is sponsored by CAA and organized by the Youth Working Committee of CAA. The 25th YAC (YAC2010) was hosted by the School of Information and Control Engineering at Liaoning Shihua University.

TECHNICAL PROGRAM

YAC2010 received 120 papers. After peer review, 61 papers were accepted by the conference and published as vol. 17 of the series *Automation Theory, Technology and Application*. These papers, most of which were supported by research funds from the National Natural Science Foundation of China (NSFC), the Ministry of Science and Technology, the Ministry of Education



Opening ceremony.

of China, the National Defense Pre-research Foundation, and scientific research funds from various ministries and provinces, highlight the latest achievements from young scientists in automation in China.

OPENING CEREMONY

Approximately 100 scholars and graduate students attended the opening ceremony of the conference on August 21, 2010. During the ceremony, the symbol of the conference, the Wiener