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Pre-conference Workshop 1

Title: History, Developments and Challenges of Optimal Control Problems for Time-delay Systems

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Abstract: The study of the optimal control problems for time-delay systems is theoretically and practically important, which has attracted considerable attention for more than half a century. However, due to inherent complexity of the time delay systems, the study of optimal control problems comes up against major difficulties. It is joyfully seen that some essential progresses for optimal control of time delay systems have been received since this century. In this presentation, we shall summarize the main results and approaches achieved recently, and investigate some problems which remain open and new challenges.



Huanshui Zhang graduated in mathematics from the Qufu Normal University in 1986 and received his MSc and Ph.D. degrees in control theory and signal processing from Heilongjiang University, China, and Northeastern University, China, in 1991 and 1997, respectively. He worked as a postdoctoral fellow at Nanyang Technological University from 1998 to 2001 and Research Fellow at Hong Kong Polytechnic University from 2001 to 2003.

He is currently a specially employed Professor of Changjiang Scholarship at Shandong University, China. He held Professor in Harbin Institute of Technology from 2003 to 2006. He also held visiting appointments as Research Scientist and Fellow with Nanyang Technological University, Curtin University of Technology and Hong Kong City University from 2003 to 2006.

His interests include optimal estimation, robust filtering and control, time delay systems, wireless communication, signal processing and wireless sensor networked systems. He is the author and co-author of over 100 publications.

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