KIOS Distinguished Lecture Series

Prof. Bin Jiang

Vice President of Nanjing University of Aeronautics and Astronautics, Nanjing, China

Monday, 2 October 2023, at 12:00 | Amphitheatre **B108**

Adaptive fault diagnosis and Reconfiguration control with flight control applications

LECTURE ABSTRACT

Based on the background of flight control systems, this talk focuses on the topic of adaptive fault accommodation for complex dynamic systems, and introduces a series of results of fault detection, estimation and accommodation for continuous time, hybrid systems and multi-agent systems. Their applications on the hot issues of satellites, near space vehicles, helicopters are investigated. Some perspectives along this direction are provided.

BRIEF BIO

Bin Jiang received the Ph.D. degree in Automatic Control from Northeastern University, Shenyang, China, in 1995. He had ever been postdoctoral fellow, research fellow, invited professor and visiting professor in Singapore, France, USA and Canada, respectively. Now he is a Chair Professor of Cheung Kong Scholar Program in Ministry of Education and Vice President of Nanjing University of Aeronautics and Astronautics, China. Currently, he serves as Senior Editor of Int. J. Of Control, Automation and Systems; Associate Editor or Editorial Board Member for a number of journals such as IEEE Trans. On Cybernetics, IEEE Trans. On Neural Network and Learning Systems, IEEE Trans. On Industrial Informatics; etc. He is an IEEE Fellow, Chair of Control Systems Chapter in IEEE Nanjing Section, a member of IFAC Technical Committee on Fault Detection, Supervision, and Safety of Technical Processes. His research interests include fault diagnosis and fault tolerant control and their applications to helicopters, satellites and high-speed trains.

He has been the principal investigator on several projects of National Natural Science Foundation of China. He is the author of 8 books and over 200 referred international journal papers and conference papers. He won Second Class Prize of National Natural Science Award of China.