



Course 1: A Concise Introduction to Control Theory for Stochastic Partial Differential Equation

Lecturer: Qi Lü (Sichuan University, China)

Abstract: In these series of talks, I give a concise introduction to control theory for systems governed by stochastic partial differential equations. We shall mainly focus on controllability and optimal control problems for these systems. We mainly focus on one dimensional stochastic parabolic equations and stochastic hyperbolic equations, which avoid many technical difficulties. In particular, we shall see that both the formulation of corresponding stochastic control problems and the tools to solve them may differ considerably from their deterministic/finite dimensional counterparts. More importantly, one has to develop new tools, say, the stochastic transposition method introduced in our previous works, to solve some problems in this field.

Biography



Qi Lü is a professor at the School of Mathematics, Sichuan University. He graduated from University of Electronic Science and Technology of China in 2004 and received his PhD in 2010 from Sichuan University under the supervision of Prof. Xu Zhang. From 2010 to 2014, he was first an assistant professor and then an associated professor at University of Electronic Science and Technology of China. From 2011 to 2012, he was a postdoctoral fellow in BCAM under the guidance of Prof. Enrique Zuazua. From 2012 to 2013, he was a postdoctoral fellow in LJLL, Paris 6 under the guidance of Prof. Jean-Michel Coron. His research fields of interest include Control theory of deterministic and stochastic partial differential equations. Qi Lü will be an invited speaker at International Congress of Mathematicians 2022 in St Petersburg, Russia.

Schedule of Course 1				
	Lecture 1	Lecture 2	Lecture 3	Lecture 4
Date	Tuesday Nov. 16	Thursday Nov. 18	Tuesday Nov. 23	Thursday Nov. 25
Time	1 pm-3 pm Paris time (8 pm-10 pm Beijing time)			
Zoom ID	856 028 30892	871 663 89023	819 010 93066	823 067 65985
Passcode	424910	451122	431795	372306
Zoom Link	Link1	Link2	Link3	Link4
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