



2011-12 Princeton Global Scholar

Shige Peng

Shige Peng is one of the most original and active contributors to the field of probability theory and financial mathematics. Recognized around the world as a leading figure for his work on backward stochastic differential equations and nonlinear expectations, he has had a profound impact in both mathematics and financial engineering. A member of the Chinese Academy of Science, he has been a plenary speaker at the International Congress of Mathematicians, one of the highest honors given to mathematicians.

As a prominent figure in the Chinese mathematics and financial engineering communities he has held numerous visiting professorships and lectured at major institutions and research conferences worldwide, including the Ecole Polytechnique, as well as Osaka, Tokyo, Columbia, Brown, and Princeton universities. He is a Professor First Class at the Institute of Mathematics, Shandong University, and a Distinguished Professor of Ministry of Education of China.

In the course of his visits to Princeton as a Global Scholar in the departments of Mathematics, Operations Research and Financial Engineering, and the Program in Applied and Computational Mathematics, Peng will help nucleate collaborative activities and research interests in the area of stochastic analysis and applications to financial mathematics. He will teach short courses on backward stochastic differential equations and the theory of nonlinear expectations, help organize formal and informal seminars on probability theory and financial mathematics, co-advise undergraduate independent work and graduate students in Mathematics, ORFE and PACM, and collaborate on research with colleagues on campus. In addition to what Peng will offer in Princeton will be his vital support for our students and colleagues who seek collaborations in China, where his status and position promises to open new doors.