

TIANYANG NIE

AI Cuza- Iasi

Title :

**"The viability of stochastic differential equation driven by fractional Brownian motion"**

**Abstract:**

According to the result of Professor Rainer Buckdahn, we know the sufficient and necessary conditions for the viability of SDE driven by classical Brownian motion. And according to the result of professor Aurel Rascanu, we know the sufficient and necessary stochastic conditions for the viability of SDE driven by FBM. In my talk, we will find the deterministic sufficient and necessary conditions for the viability of SDE driven by FBM when  $K$  is in some particular case. On the other hand, we will give some applications of this result.