学术报告

## Some Regularity Results of Stochastic Convolutions of Functional Linear Differential Equations with Memory

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**Time:** 14:30-15:30, July 2(Tuesday) 2019

Venue: Room 111, Center for Applied Mathematics

**Abstract:** In this talk, we consider the regularity property of stochastic convolutions for a class of abstract linear stochastic retarded functional differential equations with unbounded operator coefficients. We establish useful estimates on fundamental solutions which are time delay versions of those on  $C_0$ -semigroups. To this end, we develop a scheme of constructing the resolvent operators for the integrodifferential equations of Volterra type since the equation under investigation is of this type in each subinterval describing the segment of its solution. Then we apply these estimates to stochastic convolutions of our equations to obtain the desired regularity property.

