Abstract

Subordinated Stochastic Processes

Subordinated stochastic processes $X(T(t))$ are obtained by time changing a parent process $X(t)$ with a positive non-decreasing stochastic process $T(t)$. The process $X(T(t))$ is said to be subordinated to the process $X(t)$ and the process $T(t)$ is called the directing process. Subordinated processes demonstrate interesting probabilistic properties and have applications in finance, economics, statistical physics and fractional calculus.

The aim of this talk is to discuss the concept of subordinated processes and to explore the applications of these processes in different fields.