AMS Graduate Chapter Talk

University of Mississippi

Friday, Oct 1, 2021

Copula based Markov Chains

Abstract

Copulas are well known tools for understanding the dependence relation among random variables. They offer the choice of appropriate models for the dependence between random variables independent from selection of marginal distributions. Often in models it is necessary to understand the dependence structures between random variables so as to be able draw wholesome conclusions from data. We are in particular interested in the dependence that arises in a Markov process in $\mathbb{R}$. A copula allows us to describe the dependence between the variables of a random process.