

Stein's Method and Self-normalized Limit Theorems

邵啟滿

Department of Mathematics, University of Oregon, USA

Abstract

In contrast to the traditional method of characteristic function, Stein in 1972 introduced a totally new method to determine the accuracy of the normal approximation. The method works well not only for independent random variables but also for dependent variables. Stein's ideas have been extended beyond normal approximation and applied to problems in other areas. In this talk we will review some recent developments on Stein's method and our focus will be on the main ideas of the method and its applications to self-normalized limit theorems.