2020년 제 3회 통계세미나

고려대학교 통계연구소와 BK21 통계학교육연구팀이 다음과 같이
공동으로 세미나를 개최하오니 많은 참여 바랍니다.

일시 : 2020년 11월 13일 (금) 오전 10시
연사 : 이해승 교수 (Western Michigan University)

Clustering Time-Evolving Networks through Temporal ERGMs

<Abstract>
 Model-based clustering of dynamic networks has emerged as one of the increasingly important research topics in statistical network analysis. We present a statistical clustering framework through the temporal exponential-family random graph models (ERGMs). The temporal ERGMs allow the specification of interesting network features (e.g., stability), and the hidden Markov structure allows the inference of the dynamic latent block structure. In this talk, we will introduce two models one with static latent block structure and the other with dynamic latent block structure. Furthermore, we will discuss a variational expectation-maximization algorithm to solve the approximate maximum likelihood estimation. The performance of our proposed methods is demonstrated through an empirical application to the international trade networks.

고려대학교 통계연구소
BK21 통계학교육연구팀