# 2021년 제 13회 통계세미나

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

일시 : 2021년 11월 26일 (금) 오전 10시
장소 : 온라인(ZOOM)으로 진행
연사 : 이장원 (최태련 교수 연구실 소속)

## Bayesian Hierarchical Functional Mixed Effects Model
## with Shape Constrained Gaussian Processes

### <Abstract>

We propose a Bayesian hierarchical functional mixed effects model for grouped data observed unequally spaced time. Our method is formulated as multivariate functional mixed effects model whose mean part and random part modeled by a Bayesian spectral analysis with and without shape constrained, such as monotone, convex, U-shaped, and multiple-extremes. By assuming on hierarchical structured on spectral coefficient, our model can capture a overall mean trend as well as group trend and subject-specific trend. For flexible modeling for a serial dependence in the temporal data, we assume that error term is a multivariate Ornstein-Uhlenbeck process. Inference is performed by Markov chain Monte Carlo methods.

# 고려대학교 통계연구소
# BK21 통계학교육연구팀