概率论系列报告

报告题目(Title): Prediction of the COVID-19 outbreak with a new stochastic dynamic model 报告人(Speaker):张原(北京大学) 时间(Time): 4月20日(周一)下午 2:00-3:00

地点(Venue): zoom 会议 (ID: 699 3781 2230)

摘要 (Abstract): The current outbreak of coronavirus disease 2019 (COVID-19) has become a global crisis due to its quick and wide spread over the world. A good understanding of the dynamic of the disease would greatly enhance the control and prevention of COVID-19. In this talk, I will discuss a novel stochastic model we proposed which aims to account for the unique transmission dynamicsof COVID-19 and capture the effects of intervention measures. Our major findings includes: (1) instead of aberration, there is a remarkable amount of asymptomatic virus carriers, (2) a virus carrier with symptoms is approximately twice more likely to pass the disease to others than that of an asymptomatic virus carrier. We also apply our model to predict the size of outbreaks in some major countries as well as the risk of oversea imported cases. This talk is based on joint works with Dr. Chong You, Mr. Zhenhao Cai, Mr. Jiarui Sun, Mr. Wenjie Hu, and Dr. Xiaohua Zhou.

欢迎奉加