Date: Friday, 26 March 2021
Time: 3:00pm – 4:00pm
Speaker: Assoc. Professor Jiancang Zhuang
Venue: Zoom

Title: Estimation, diagnostics, and extensions of nonparametric Hawkes processes

Abstract: The Hawkes self-exciting model has become one of the most popular point-process models in many research areas in the natural and social sciences because of its capacity for investigating the clustering effect and positive interactions among individual events/particles. This talk discusses a general nonparametric framework for the estimation, extensions, and post-estimation diagnostics of Hawkes models. For illustration, I use the kernel function as the basic smoothing tool and the earthquake data and crime data as two application examples, to show how a Hawkes model is formulated from scratch.