

Optimal Spatial Sampling Design: Theory and Applications

Zhengyuan Zhu

Iowa State University, USA

In many application areas such as agriculture, ecology, environmental science, geology, and natural resource management, it is necessary to collecting data in space. In this talk we will give an overview of classical methods commonly used for spatial sampling design, including both design based approach and model based approach, and introduce some of the new approaches for sampling random fields. Examples in precision agriculture and natural resource survey will be used to illustrate the methodology.