## **Statistics and Data Science Seminar**

Recent advances in crossover designs and related studies

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**Abstract:** Crossover design is a design of experiments, where a subject receives a sequence of various treatment over a period of time points. While it provides the within subject comparison between treatment effects, the potential carryover effect in the model makes the study of optimal crossover designs quite complicated. Such study was initiated by Hedayat and Afsarinejad (1978), and many researchers have contributed to the general theory for optimal designs. Among them, Kushner (1997) developed very elegant results for the optimality conditions in the approximate design theory. My talk will mainly focus on this approach and talk about some recent progress as well as future challenges. I will also share some of my own thoughts of how to tackle these problems.

Wednesday, May 3 at 4:00 PM in SEO 636