

## QMC Opening Workshop August 28-September 1, 2017

**Lecture:** New Problems and Algorithms at the Interface of Optimal Transport, Statistics and Operations Research

**Speaker:** Jose Blanchet

## **Abstract:**

Recently, there has been a surge in activity at the interface of optimal transport and statistics (with special emphasis on machine learning applications). The talk will summarize new results and challenges in this active area. For example, we will show how many of the most popular estimators in machine learning (such as Lasso and svm's) can be interpreted as games. This interpretation opens the door for new and potentially better estimators and algorithms, as well as questions about the underlying complexity of these new class of estimators.

(This talk is based on joint work with F. He, Y. Kang, K. Murthy, and F. Zhang)