## YIFAN JING, Ohio State University

Measure doubling for small sets in compact Lie groups

A central problem in additive combinatorics is to understand how the size of a sumset (or product set) compares to the size of the original set, and to describe the underlying structure when this "doubling" is small. In this talk, I will survey some classical results in the area and discuss recent developments in the setting of compact Lie groups, based on joint work with Chieu-Minh Tran and Simon Machado.