

# Sophia University

## Mathematics Colloquium

**When:** Friday, Dec. 14, 2018, 17:30—18:30

**Where:** 014B (B1), Main Bldg., Ichigaya-Campus

**Speaker:** Eren Mehmet Kiral (Sophia University)

**Title:** Reciprocity in Moments of L-functions

**Abstract:** There are various curious identities between moments and twisted moments of L-functions in the literature, such as the result of Motohashi's identity with the third moment of Maass forms on one side of the equation and the fourth moment of the Riemann zeta function on the other. These identities have had successful applications to bounding moments of L functions, sometimes implying subconvexity results.

Unfortunately there is no unifying theory that binds these moment identities yet. In this talk I will list the known results in the literature including our recent joint work with Nickolas Andersen. This is intended for a general audience, and a brief introduction to L-functions and various modular/automorphic objects will be given in the beginning of the talk.