Sophia University **Mathematics Colloquium** 

**When:** Friday, October 21, 2016, 17:15-18:30

Where: Room No. 201, Main Bldg., Ichigaya-Campus

Speaker: Yuichiro Taguchi (Tokyo Institute of Technology)

Title: On the Hecke fields of Galois representations

**Abstract:** 

Koo, Stein and Wiese showed that, under a mild condition, the Hecke field of an elliptic modular eigenform is generated by a single Fourier coefficient a\_p for p in a

set of primes p with positive density.

I will explain that a similar phenomenon can be proved for a much wider class of

1-adic Galois representations of number fields, and hence for some automorphic

representations. I will also discuss what can be said in the case of family of l-adic

Galois representations.

This is a joint work with Dohoon Choi.