Arithmetic Day

Time: Mar 22, 2018

Schedule: 9:30-10:30 Chan-ho Kim

10:45-11:45 Ruochuan Liu

Lunch

13:30-14:30 Kentaro Nakamura

14:45-16:00 Yiwen Ding

Venue: Room 2213, East Main Guanghua Tower, Handan Campus

Speaker: Yiwen Ding

Title: Higher L-invariants for GL3(Qp)

Abstract: We introduce and study higher L-invariants for GL3(Qp). In ordinary case, we prove a local-global compatibility result on the equality of Fontaine-Mazur L-invariants and automorphic L-invariants. This is a joint work with Christophe Breuil.

Speaker: Kentaro Nakamura

Title: Euler system for rank two universal deformation

Abstract: This is a work in progress. Using recent works of Fukaya-Kato on Sharifi conjecture and of Caraiani-Emerton-Gee-Geraghty-Paskunas-Shin on complete cohomology of modular curves, we construct an Euler system for universal deformation of rank two, which interpolates Kato's Eule r system for Galois representations associated to Hecke eigen cusp newforms.

Speaker: Ruochuan Liu

Title: P-adic Riemann-Hilbert correspondence, de Rham comparison and periods on Shimura varieties

Abstract: In the previous work with Xinwen Zhu we construct a p-adic analogue of the classical Riemann-Hilbert correspondence. As a by-product the de Rham periods of a general Shimura variety are obtained. In a recent joint work with Hansheng Diao, Kai-Wen Lan and Xinwen Zhu, we further establish a logarithmic version of the correspondence which enables us to establish the de Rham comparison theorem with coefficients for quasi-projective varieties and compare the de Rham periods and complex periods for a general Shimura variety.

Speaker: Chan-ho Kim

Title: On the Iwasawa main conjecture for modular forms

Abstract: We present a numerical criteron to verify the Iwasawa main conjecture for modular forms at any good primes. This is joint work with Myoungil Kim and Hae-Sang Sun.

Shanghai Center for Mathematical Sciences
22F East Guanghua Tower, No.220 Handan Road, Shanghai, China
Tel: 55665643 Fax: 65642190 Postcode: 200433 Email: scms@fudan.edu.cn