

中央研究院數學研究所

Institute of Mathematics, Academia Sinica

Taipei Postdoc Seminar

Speaker : 陳昱宇 Shih-Yu Chen

(本所 Academia Sinica)

Title : On Deligne's Conjecture for Symmetric Fourth L-functions of Hilbert Modular Forms

Time : 14:00 - 15:00, Wednesday, March 10, 2021

Venue : Lecture Hall 5F, Cosmology Building (NTU Campus) 次震宇宙館 五樓演講廳

Abstract :

It was conjectured by Deligne and Clozel that the algebraicity of critical values of automorphic L-functions for cohomological cuspidal automorphic representations should be expressed in terms of the conjectural motivic periods of the associated motive. Very little is known for the general cases by far. A special class of examples are the symmetric power L-functions of cohomological cuspidal automorphic representations of GL_2 over totally real number fields. In these cases, the conjectural periods are product of the Petersson norms of Hilbert cusp newform and Deligne's motivic periods for GL_2 .

In this talk, we introduce our recent work on the symmetric fourth L-functions. We extend the result of Morimoto based on generalization and refinement of the results of Grobner and Lin to cohomological irreducible essentially conjugate self-dual cuspidal automorphic representations of GL_2 and GL_3 over CM-fields.

Organizer : Wei-Bo Su (Academia Sinica), Peng-Jie Wong (National Center for Theoretical Sciences)

https://www.math.sinica.edu.tw/www/file_upload/conference/2016TPS/index.html

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