

SCMS Seminar



ANALYTIC FUNCTIONS ON THE DRINFELD TOWER AND THE P-ADIC LOCAL LANGLANDS CORRESPONDENCE

Prof. Gabriel Dospinescu

Ecole Normale Supérieure de Lyon

Lecture 1

Time: 10:00-11:30 am, 3:30-5:00 pm., Tuesday, Oct.20, 2015

Lecture 2

Time: 10:00-11:30 am, 3:30-5:00 pm., Tuesday, Oct.27, 2015

Lecture 3

Time: 1:30-3:00 pm, 3:30-5:00 pm., Wednesday, Nov.4, 2015

Lecture 4

Time: 10:00-11:30 am, 3:30-5:00 pm., Tuesday, Nov.10, 2015

Lecture 5

Time: 10:00-11:30 am, 3:30-5:00 pm., Tuesday, Nov.17, 2015

Lecture 6

Time: 10:00-11:30 am, 3:30-5:00 pm., Tuesday, Nov.24, 2015

Lecture 7

Time: 10:00-11:30 am, 3:30-5:00 pm., Tuesday, Dec.1, 2015

Venue: Room 2201, East Main Guanghua Tower, Handan Campus

Abstract: We will explain the proof of a (version of a) conjecture of Breuil and Strauch, obtained in recent joint work with Arthur-César Le Bras. This gives a purely geometric realization of the p-adic local Langlands correspondence for $GL_2(\mathbb{Q}_p)$, for de Rham representations which are not trianguline. The key geometric tool is the de Rham complex of the étale coverings of Drinfeld's upper half-plane, which we completely describe in terms of the representations constructed by Colmez using the theory of phi-Gamma modules.