

SCMS Seminar



A SUPERFICIAL INTRODUCTION TO LAFFORGUE'S EXCURSION OPERATORS

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Time: 9:30 -10:20, Tuesday, July 18, 2017

Venue: Room 2201, East Guanghua Tower (Main), Fudan University

Abstract:

In a groundbreaking work, V. Lafforgue introduced the excursion operators on the space of cusp forms for a connected reductive group G , over a global field of positive characteristic. These operators are defined via the geometry of the moduli space of G -chtoucas with r paws. Using this together with other innovations, he obtained the automorphic-to-Galois direction of the global Langlands conjecture. In this talk, or a reading report in disguise, I will try to give a very brief introduction to this circle of ideas.

$$b_i = \frac{\sum_{j=1}^{i-1} a_{ij} x_j^{(k)} + \sum_{j=i+1}^n a_{ij} x_j^{(k)}}{\sum_{j=1}^{i-1} a_{ij} x_j^{(k)} + \sum_{j=i+1}^n a_{ij} x_j^{(k)}}$$
$$\Delta y_i = \int_{x_i}^{x_{i+1}} y' dx$$
$$\int_{x_k}^{x_{k+1}} f(x, y) dx = \int_{x_k}^{x_{k+1}} y' dx = y(x)$$
$$-\sqrt{(y_n + 0.5\tau k_1)^2 + (t_n + 0.5\tau)^2}$$