

**Prof. Tomoyuki Abe**

Title: Langlands program for p-adic coefficients and petits camarades conjecture

Abstract:

We will show that Deligne's "petits camarades conjecture" is equivalent to Langlands program for function fields for p-adic coefficients. As an application, we show that rank 2 overconvergent  $F$ -isocrystals on smooth varieties are mixed. The main ingredient of the proof is the product formula for epsilon factors, which is a joint work with A. Marmora.