# EXPLICIT MOD-\ELL CATEGORICAL LOCAL LANGLANDS CORRESPONDENCE FOR DEPTH-ZERO SUPERCUSPIDAL PART OF GL_2

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**Time：Wed, Sep. 6, 17:00-18:00**

**Venue: Room 406, Shanghai Center for Mathematical Sciences**

**Abstract:** Let F be a non-archimedean local field. I will explicitly describe:

(1) (the category of quasicoherent sheaves on) the connected component of the moduli space of Langlands parameters over Z_l-bar containing an irreducible tame L-parameter with F_l-bar coefficients;

(2) the block of the category of smooth representations of G(F) with Z_l-bar coefficients containing a depth-zero supercuspidal representation with F_l-bar coefficients.

The argument works at least for (simply connected) split reductive group G, but I will focus on the example of GL_2 for simplicity. The two sides turn out to match abstractly. If time permits, I will explain how to get the categorical local Langlands correspondence for depth-zero supercuspidal part of GL_2 with Z_l-bar coefficients in Fargues-Scholze's form.