ARITHMETIC LEVEL RAISING FOR ODD UNITARY GROUPS I

Speaker: Ruiqi Bai
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Time：**Tue, Jan. 31, 14:00-16:00**

Venue: Room 102, SCMS

Abstract: Let n be an odd integer. Let X be the mod p fiber of the Shimura variety associated to U(n-1,1). We geometrically construct some K_1-elements on the supersingular locus of X and try to use these elements to prove the surjectivity of Abel-Jacobi map. Some kind of Ihara lemmas are also involved in the proof. This work is inspired by the work of Rong Zhou on quaternionic Shimura varieties and is somehow parallel to the on-going work of Yifeng Liu, Yichao Tian and Liang Xiao on even unitary groups.

The talk will contain two parts. In the first part, we will give a general introduction on the whole story. In the second part, we will talk about more details of the proof in the case where n=3. We are sincerely looking forward for comments and suggestions.