

POTENTIAL AUTOMORPHY FOR GL_n

Speaker: Lie Qian
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Time: Tue, Dec. 7, 9:30-10:30

Venue: Zoom ID: 969 3597 9137, Passcode: SCMS

Abstract: We prove that under mild condition for the residual representation, any ordinary p -adic representation of the absolute Galois group G_F of a CM number field F can be made automorphic when restricted to some subgroup $G_{F'}$. The result gives a much larger class of potential automorphic Galois representation than previously known in the sense that most previous results works with groups like Sp_n , or a compatible family of Galois representation. The family of Dwork motives is the main object we study. Along the way, we also prove an interesting ordinarity result concerning the cohomologies (viewed as local p -adic Galois representation) associated to certain fibres of that family.