

p -adic families of automorphic forms and a p -adic trace formula

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Abstract

The purpose of this talk is to define p -adic automorphic distributions that are used in the construction of p -adic families of cuspidal automorphic forms. An important fact is that these distributions are p -adic analytic as the weight varies. As a consequence of this fact, one can express them in geometric terms using Arthur–Franke’s formulas for Lefschetz numbers. We hope this expression could be of some use to prove some instance of Langlands functoriality for p -adic automorphic forms.