

BOSTON UNIVERSITY NUMBER THEORY SEMINAR

An introduction to the local Langlands correspondence

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Monday, October 31 at 4:15 pm
111 Cummington Mall, MCS B21
Tea and cookies in MCS 144 at 4:00 pm

Abstract: Let F be a p -adic field. According to local class field theory, characters of F are in correspondence with characters of the Weil group W_F . The local Langlands correspondence is a conjectural classification of representations of a reductive group G/F ; local class field theory is the case $G = \mathrm{GL}_1$. For $G = \mathrm{GL}_n$, the correspondence is a theorem of Harris-Taylor, which places representations of $\mathrm{GL}_n(F)$ into correspondence with n -dimensional representations of W_F . A few subtleties occur for groups other than GL_n , and these will be the focus of the talk.