Applications of Eisenstein series in construction of automorphic representations

(Talk)

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The classical Eisenstein series are complex-valued functions on the complex upper-half plane. Even in the classical setting they embody a lot of number-theoretic information. In the adelic setting, there is a natural generalization of these classic Eisenstein series to the functions on the (adele points) of reductive groups. In this new setting there is an interplay between representation theory and number theory, where some problems originally from number theory can be tackled using representation-theoretic methods. We shall present some examples of use of Eisenstein series in the explicit construction of automorphic representations.

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