

Séminaire de théorie des nombres

Le 8 juin 2015 à 14h (PRG)

The span of restrictions of coherent Eisenstein series

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Résumé : In the theory of modular forms, Eisenstein series plays an important role because of its explicit Fourier coefficients. It is well-known that the algebra of modular forms on $SL_2(\mathbb{Z})$ is generated by the classical Eisenstein series E_4 and E_6 . For a fixed weight k , Kohnen and Zagier showed that it suffices to consider the span of the products of two Eisenstein series E_ℓ and $E_{k-\ell}$. In this talk, we will look at a related question, first raised by Tonghai Yang, about the span of the restrictions of coherent Eisenstein series. We will discuss the construction of these Eisenstein series, its relationship to special values of L-function, and other related open problems.