

Séminaire de théorie des nombres

Le 15 juin 2009 à 14h

Hodge correlators and a generalization of Rankin-Selberg integrals

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Résumé : We describe the real mixed Hodge structure on the rational homotopy type of a complex variety X in a new way, as correlators for some Feynman integrals related to X .

These correlators are perfectly well defined integrals on products of copies of X .

In the special case when X is a modular curve, the simplest of these correlators turns out to be the Rankin-Selberg integrals for the special values of (products of) modular forms.