Séminaire d'algèbre, topologie et géométrie Jeudi 26 mai à 14h Salle I

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Volume Identities for hyperbolic manifolds with boundary

Given a finite volume hyperbolic n-manifold M with totally geodesic boundary, we show there is a real valued function F_n such that the volume of any finite volume hyperbolic n-manifold M with totally geodesic boundary Mis the sum of values of F_n on the orthogeodesic length spectrum. For n = 2the function F_2 is the Rogers L-function and the summation identities give dilogarithm identities on the Moduli space of surfaces. This is joint work with Jeremy Kahn.