

## **Exotic volumes**

Marc Burger, Swiss Federal Institute of Technology

For an open manifold which is amenable at infinity we introduce a notion of volume for any representation of its fundamental group into  $SL(n, \mathbb{C})$ . We illustrate its use in the case of finite volume hyperbolic 3-manifolds.

We also discuss the case of even dimensional hyperbolic manifolds and representations into  $SO(n, 1)$ : interesting differences between dimension two and dimension 4 or higher, appear.

(This is joint work with Michelle Bucher-Karlsson and Alessandra Iozzi.)