François Ledrappier* (fledrapp@nd.edu), Department of Mathematics, University of Notre Dame, Notre Dame, IN 46556-4618. Boundary measures minimizing the Rayleigh quotient. Preliminary report.

Let $M$ be a compact manifold with negative curvature, $\widetilde{M}$ its universal cover, $\partial\widetilde{M}$ the boundary at infinity of $\widetilde{M}$. Olivier Mohsen defined the Rayleigh quotient of an equivariant family of measures on $\partial\widetilde{M}$. We show (joint work with Seonhee Lim) that there exist a minimizing family. In this talk, we describe the construction of this minimizing family and some of its properties. (Received August 31, 2014)