1046-37-1544

Francois Ledrappier (fledrapp@nd.edu), 255 Hurley Hall, Notre Dame, IN 46556, and Seonhee Lim* (slim@math.cornell.edu), 593 Malott Hall, Cornell University, Ithaca, NY 14853-4201.

Volume entropy and measure of maximal entropy of hyperbolic buildings. Preliminary report.

In contrast to symmetric spaces, we show that for certain hyperbolic buildings with symmetric metric on each apartment, the Liouville measure is not equal to the Bowen-Margulis measure i.e. the measure of maximal measure-theoretic entropy. As a consequence, we obtain a strict lower bound on the volume entropy for such buildings in terms of "weighted" perimeter. (Received September 16, 2008)