Bounded cohomology via differential forms and cup product

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Abstract: Integrating over straight simplices defines a map from the space of closed differential k-forms of a negatively curved Riemannian manifold to its degree k bounded cohomology. In particular, in a 1988 paper J.Barge and E.Ghys showed that the case of closed surfaces S and k=2 is particularly interesting since this map is injective and thus $\Omega^2(S)$ defines an infinite dimensional subspace of $H^2_b(S)$.
We will have a look at some facts about bounded cohomology classes defined by differential forms. Then we will show that the cup product of a class defined by an exact 2-form with any other class is always trivial in bounded cohomology.