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**Jerome Kaminker\*** ([kaminker@math.iupui.edu](mailto:kaminker@math.iupui.edu)), Department of Mathematics, IUPUI,  
Indianapolis, IN 46202. *Tessera expanders and Lipschitz cohomology.*

Romain Tessera has introduced a generalized notion of expander. In joint work with Lucas Sabalka, we have studied a moduli space of Tessera expanders. This is used to study the obstruction to being able to coarsely embed a metric space into a Hadamard manifold. We also study how these expanders obstruct the property that all the cohomology of a discrete group is Lipschitz (in the sense of Connes-Gromov-Moscovici). In general this work is aimed at understanding how classes in the cohomology of a group might satisfy the Novikov conjecture, yet not come, in some sense, from a boundary. (Received August 12, 2008)