Rufus Willett* (rufus@math.hawaii.edu), University of Hawaii Mathematics Department, 2565 McCarthy Mall, Keller 401A, Honolulu, HI 96822. Expanders and K-theory.

I’ll survey problems caused by expanders for Baum-Connes type conjectures in K-theory. Although all expanders have some pathological properties with respect to these conjectures, some expanders are much worse than others. I’ll discuss what’s known about the metric properties that give rise to this, and how it relates to the Gromov monster groups that contain expanders in their Cayley graphs.

Some of this is from joint work with Guoliang Yu, and some from joint work with Paul Baum and Erik Guentner. (Received August 31, 2013)