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Riikka Korte* (rkorte@math.hut.fi), Institute of Mathematics, P.O. Box 1100, 02015 Espoo, Finland. *Poincaré inequality and quasiconvexity of annuli.*

We consider the following result: If a doubling metric measure space supports a weak $(1, p)$ -Poincaré inequality with p sufficiently small, then annuli are almost quasiconvex. We also discuss some other geometric implications of the Poincaré inequality. (Received August 29, 2006)