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Matthew Badger and **James T. Gill***, 220 N. Grand Blvd, St. Louis, MO 63103, and **Steffen Rohde** and **Tatiana Toro**. *Quasisymmetry and rectifiability of quasispheres.*

We obtain Dini conditions with "exponent 2" that guarantee that an asymptotically conformal quasisphere is rectifiable. In particular, we show that for any $\epsilon > 0$ integrability of

$$\left(\sup_{1-t < |x| < 1+t} K_f(x) - 1 \right)^{2-\epsilon} dt/t$$

implies that the image of the unit sphere under a global quasiconformal homeomorphism f is rectifiable. We also establish estimates for the weak quasisymmetry constant of a global K -quasiconformal map in neighborhoods with maximal dilatation close to 1. (Received February 04, 2014)