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Philip L. Bowers* (bowers@math.fsu.edu), Department of Mathematics, FSU, Tallahassee, FL 32306, and **Ken Stephenson**, Department of Mathematics, University of Tennessee, Knoxville, TN 37996. *Determining the type of conformal tilings.*

The idea of *conformal tiling* grew out of the study of the finite subdivision rules introduced by Cannon, Floyd, and Parry in their investigation of the Cannon Conjecture in geometric topology. After presenting the main ideas behind conformal tiling and expansion complexes, we introduce the *type problem* that asks whether the conformal tiling associated to a planar polygonal complex tiles the hyperbolic or the Euclidean plane. Using the technology of conformal hierarchies of tilings, we show how to resolve the type problem for single tile type, dihedrally symmetric rules that generate conformal tilings and prove that type is constantly parabolic across the local isomorphism class of such a tiling. We report briefly on Dane Mayhook's recent generalization to rotationally symmetric rules that relaxes the *conformal* hierarchy to a *combinatorial* hierarchy and then applies ideas from Bowers-Stephenson to an associated fractal tiling due to Cannon-Floyd-Parry. If time permits, we end with some examples of hyperbolic tilings and some open problems. (Received January 27, 2014)