1042-30-214 **Katsuhiko Matsuzaki*** (`matsuzak@math.okayama-u.ac.jp`), Department of Mathematics, Okayama University, Tsushima-naka 3-1-1, Okayama, Okayama 700-8530, Japan. *Symmetric groups that are not the symmetric conjugates of Fuchsian groups.*

A *quasiconformal group* is a discrete group of quasiconformal automorphisms of the unit disk Δ whose maximal dilatations are uniformly bounded. A quasisymmetric automorphism of the unit circle $\partial\Delta$ is the boundary extension of a quasiconformal automorphism of Δ. A *quasisymmetric group* is a discrete group of quasisymmetric automorphisms of $\partial\Delta$ whose quasisymmetric constants are uniformly bounded. Markovic has proved that every quasisymmetric group is conjugate to a Fuchsian group by a quasisymmetric homeomorphism $\partial\Delta \to \partial\Delta$, or equivalently, every quasisymmetric group is the boundary extension of a quasiconformal group.

An *asymptotically conformal group* is a quasiconformal group whose elements are asymptotically conformal automorphisms of Δ. A symmetric automorphism of $\partial\Delta$ is the boundary extension of an asymptotically conformal automorphism of Δ. A *symmetric group* is a quasisymmetric group whose elements are symmetric automorphisms of $\partial\Delta$. In this talk, we consider a problem whether a symmetric group is conjugate to a Fuchsian group by a symmetric homeomorphism $\partial\Delta \to \partial\Delta$ or not. (Received August 19, 2008)

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