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Keith Burns* (burns@math.northwestern.edu), Department of Mathematics, Northwestern University, 2033 Sheridan Rd, Evanston, IL 60208, **Howard Masur** (masur@math.uchicago.edu), Department of Mathematics, University of Chicago, 5734 S. University Ave., Chicago, IL 60637, and **Amie Wilkinson** (wikinso@math.northwestern.edu), Department of Mathematics, Northwestern University, 2033 Sheridan Rd, Evanston, IL 60208. *Ergodicity of the Weil Petersson geodesic flow.*

The Weil-Petersson metric is a Riemannian metric on the moduli space of a surface. It has negative curvature, but is incomplete. Analogy with the results of Hopf and Anosov for complete metrics of negative curvature suggested that the geodesic flow for the Weil-Petersson metric should be ergodic, but the incompleteness of the metric and insufficient knowledge of its geometry delayed a proof. We now know a great deal about the geometry of the Weil-Petersson metric, in large part due to the work of Scott Wolpert, and ergodicity of the geodesic flow has been proved by Burns, Masur and Wilkinson. The proof uses the results of Wolpert and the theory of nonuniformly hyperbolic dynamical systems, in the particular the work of Katok and Strelcyn. (Received September 21, 2011)