

1139-53-308

**David Gu, Feng Luo** and **Tianqi Wu\*** ([tianqi@cims.nyu.edu](mailto:tianqi@cims.nyu.edu)). *Convergence of Discrete Conformal Geometry and Computation of Uniformization Maps.*

The classical uniformization theorem of Poincaré and Koebe states that any simply connected surface with a Riemannian metric is conformally diffeomorphic to the Riemann sphere, or the complex plane or the unit disk. Using the work by Gu-Luo-Sun-Wu on discrete conformal geometry for polyhedral surfaces, we provide an algorithm which computes the uniformization maps for Riemannian disks. (Received February 15, 2018)