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Eran Makover* (makovere@ccsu.edu), Department of Mathematical Sciences, Central Connecticut State University, 1615 Stanley Street, New Britain, CT 06050, and **Jeff McGowan**, CT. *The fundamental domain of Random Riemann surfaces.*

We investigate relations between the cubic graphs and Riemann surfaces that are constructed from a random choice of a graph and orientation. Our goal is to describe that global geometry of a "typical" Riemann Surfaces. This model of constructing surfaces from graphs enables us to study properties like the Cheeger constant, systole length, and the size of embedded balls in large genus surfaces by examining random cubic graphs. (Received September 11, 2009)