Nicolae Tecu* (nicolae.tecu@gmail.com). Random conformal weldings at criticality.

We present an extension to criticality of a random conformal welding result by Astala, Jones, Kupiainen and Saksman by which we obtain closed random curves in the plane. The welding is done by using a random homeomorphism obtained by exponentiating the Gaussian Free Field. (Received February 13, 2012)