

1059-30-4

**Steffen Rohde\*** ([rohde@math.washington.edu](mailto:rohde@math.washington.edu)), University of Washington, Department of Mathematics, Box 354350, Seattle, WA 98195. *Random Conformal Maps*.

I will discuss three somewhat different types of problems that involve random conformal maps, surveying some of the highlights of this theory and discussing open questions. The main part of my talk will be devoted to the most prominent family of random conformal maps, Oded Schramm's Loewner Evolution SLE, which has been instrumental in the solution of several problems originating in mathematical physics. (Received February 23, 2010)