Huy Tran* (tranvohuy@gmail.com), University of Washington, Department of Mathematics, Box 354350, Seattle, WA 98105, and Steffen Rohde and Michel Zinsmeister. The Loewner equation and Lipschitz graphs. Preliminary report.

The proofs of continuity of Loewner traces in the stochastic [Rohde&Schramm] and in the deterministic settings [Marshall&Rohde], [Lind] employ different techniques. In the former setting of the Schramm-Loewner evolution SLE, Hölder continuity of the conformal maps is shown by estimating the derivatives, whereas the latter setting uses the theory of quasiconformal mapping. In this talk, we will adopt the former method to the deterministic setting and present a new and elementary proof that Hölder-1/2 driving functions with norm less than 4 generate simple arcs. We will also present a sufficient condition for driving functions to generate curves that are graphs of Lipschitz functions. (Received January 27, 2014)