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Robert Masson* (rmasson@math.ubc.ca), Department of Mathematics, The University of British Columbia, Room 121, 1984 Mathematics Road, Vancouver, BC V6T1Z2, Canada. *The growth exponent for loop-erased random walk.*

I give a new proof of a result of Kenyon that the growth exponent for loop-erased random walks in two dimensions is $5/4$. The proof uses the convergence of loop-erased random walk to Schramm-Loewner evolution with parameter 2, and is valid for irreducible bounded symmetric random walks on any discrete lattice of \mathbb{R}^2 . I also show how to use some of these techniques to prove the existence of the growth exponent for loop-erased random walk in three dimensions. (Received August 08, 2008)