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Huy V. Tran* (tvhuy@math.ucla.edu). *Convergence of an algorithm simulating SLE and Loewner curves.*

Together with the development of Schramm-Loewner evolution (SLE) which is scaling limits of many discrete models from statistical physics one want to see pictures of SLE directly from Loewner equation. The most standard method suggested by Marshall and Rohde is to sample Brownian motion at discrete times and interpolate appropriately between. This algorithm always produces piecewise smooth non self-intersecting curves whereas SLE_κ has been proven to be simple for $\kappa \in [0, 4]$, self-touching for $\kappa \in (4, 8)$ and space-filling for $\kappa \geq 8$. In the talk we show that this sequence of curves converges to SLE_κ for all $\kappa \neq 8$ by giving a condition of deterministic driving functions for having sup norm convergence of simulated curves when we use the same algorithm for these driving functions. (Received January 17, 2015)