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Ewain Gwynne* (ewain@mit.edu) and **Jason Miller**. *Convergence of the self-avoiding walk on random quadrangulations to $SLE_{8/3}$ on $\sqrt{8/3}$ -Liouville quantum gravity.*

We prove that a uniform infinite quadrangulation of the half-plane decorated by a chordal self-avoiding walk (SAW) converges in the scaling limit to $SLE_{8/3}$ on an independent $\sqrt{8/3}$ -Liouville quantum gravity surface, which can equivalently be described as the metric gluing of two independent Brownian half-planes identified along their positive boundary rays. The topology of convergence is the local Gromov-Hausdorff-Prokhorov-uniform topology, the natural generalization of the local Gromov-Hausdorff topology to curve-decorated metric measure spaces. The proof of the scaling limit result uses only the theory of random planar maps and does not make direct use of SLE or LQG. Based on joint work with Jason Miller <https://arxiv.org/abs/1608.00956>. (Received January 27, 2017)