1108-60-451 **Ewain Gwynne** and **Jason Peter Miller*** (jpmiller@mit.edu), Massachusetts Institute of Technology, Department of Mathematics, E18-470, 77 Massachusetts Avenue, Cambridge, MA 02139, and **Xin Sun**. *Almost sure multi-fractal spectrum of SLE.*

Suppose that $\eta$ is a Schramm-Loewner evolution ($\mathrm{SLE}_\kappa$) in a smoothly bounded simply connected domain $D \subset \mathbb{C}$ and that $\phi$ is a conformal map from $\mathbb{D}$ to a connected component of $D \setminus \eta([0,t])$ for some $t > 0$. The multifractal spectrum of $\eta$ is the function $(-1,1) \to [0,\infty)$ which, for each $s \in (-1,1)$, gives the Hausdorff dimension of the set of points $x \in \partial\mathbb{D}$ such that $|\phi'((1-\epsilon)x)| = \epsilon^{-s+o(1)}$ as $\epsilon \to 0$. We rigorously compute the a.s. multifractal spectrum of SLE, confirming a prediction due to Duplantier. As corollaries, we confirm a conjecture made by Beliaev and Smirnov for the a.s. bulk integral means spectrum of SLE and we obtain a new derivation of the a.s. Hausdorff dimension of the SLE curve for $\kappa \le 4$. Our results also hold for the $\mathrm{SLE}_\kappa(\underline{\rho})$ processes with general vectors of weight $\underline{\rho}$. (Received January 19, 2015)