

$$S_t \circ c(h)(a_s)_{ti} c(s) + \mathfrak{S}_e m^i n(a_r)$$

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## Hausdorff dimension of the SLE curve intersected with the real line

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In the range  $4 < \kappa < 8$ , an SLE curve intersects the real line at a random set of points. The resulting set is sufficiently irregular as to have a fractional dimension. An upper bound for this dimension is given by a well-known, exact formula for the probability of an SLE curve intersecting a given interval on the positive real line. I present an upper bound on the asymptotic probability of an SLE curve hitting two intervals on the positive real line, as the width of the intervals goes to zero, which in turn establishes the lower bound for the dimension. This is work done with my advisor, Scott Sheffield.