

# **Imaginary Geometry and the Gaussian Free Field**

*Jason Miller*  
*Microsoft Research*

I will describe how SLE curves can be realized as the flow lines of a random vector field generated by the Gaussian free field, the two-time-dimensional analog of Brownian motion. I will also explain how this perspective can be used to prove several new results regarding the sample path behavior of SLE, in particular reversibility results for all kappa values.

Based on joint works with Scott Sheffield.