

1031-60-5

Scott Sheffield*, Courant Institute, and Institute for Advanced Study. *Random metrics and geometries in two dimensions.*

Many “quantum gravity” models in mathematical physics can be interpreted as probability measures on the space of metrics on a Riemannian manifold. We describe several recently derived connections between these random metrics and certain random fractal curves called “Schramm-Loewner evolutions” (SLE). (Received November 15, 2006)