

1120-60-260

Brent Morehouse Werness* (bwerness@math.washington.edu). *Convergence of discrete holomorphic functions on non-uniform lattices.*

The theory of discrete holomorphic functions has been studied by researchers from a diverse set of fields from classical complex analysts to applied computer scientists. In the field of conformally invariant random processes, discrete analyticity has found a particularly central role as the convergence of discrete analytic functions to their continuum counterparts is the key step in the showing convergence of discrete random processes to Schramm–Loewner Evolutions. In this talk, we will discuss recent work that proves that discrete analytic functions converge to their continuum counterparts on lattices with only local control on the geometry and its potential applications of this result to the study conformally invariant random processes on random surface models. (Received February 23, 2016)