

COLLOQUIUM

MATH SIUC

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**Distributional Limits, Doubling Metric Spaces,
and Lemma**

Abstract

In 2001 Benjamini and Schramm proved that the distributional limit of a random graph with bounded degree is almost surely recurrent with respect to the random walk. To prove this fact they devised an interesting lemma about finite point sets in the plane. Since then this same lemma has been used several times in different contexts. In particular, in joint work with S. Rohde, we used it to show that the uniform infinite planar triangulation is almost surely a parabolic Riemann surface. In further investigation by the speaker it has been found that the conclusion of this lemma holds in any doubling metric space. In fact, the metric doubling condition is equivalent to the property described in the lemma.

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Time: 3:00PM
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Place: Neckers A 156

Reception immediately
following in Math Library.