

A Statistical Model for Riemann Surfaces

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102 Bradley Hall, 4:00 pm
(Tea 3:30 pm Math Lounge)

Abstract

(joint work with Eran Makover) What does a “typical” Riemann surface of large genus look like geometrically? It turns out that much interesting behavior occurs for Riemann surfaces which are in some sense random.

We show how such behavior can be studied by modeling Riemann surfaces on 3-regular graphs. We will discuss what kinds of behavior this model reveals, both about Riemann surfaces and about 3-regular graphs.