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*From Mirzakhani's Volumes to Random Surfaces*

We will explore what it means to choose a random geometric surface, using natural probability measures on moduli space, and describe some of the limiting geometric phenomena that emerge for high genus surfaces. In this setting, many geometric features stabilize as the genus tends to infinity and, somewhat paradoxically, become easier to describe and compute, for example the distribution of short geodesics and the geometry of a typical neighborhood of a random point. This perspective was initiated by Mirzakhani, who used Weil-Petersson volume to define a natural notion of a random hyperbolic surface and to calculate expected values of various geometric quantities. I will explain these ideas and then discuss analogous questions and results for flat surfaces, highlighting connections between geometry, dynamics and low-dimensional topology.