

## **Random lemniscates**

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A rational lemniscate is the level set of the modulus of a rational function. While sampling from an ensemble of random lemniscates that is invariant under rotations of the Riemann sphere, we study basic geometric and topological properties. For instance, what is the average (spherical) length of a random lemniscate? How many connected components are there and how are they arranged in the plane? We will make these questions precise and address each of them.

This is joint work with Antonio Lerario.