



ODTU-Bilkent Algebraic Geometry

An upper bound on the expected areas of amoebas of plane algebraic curves

By

Ali Ulaş Özgür Kişisel

Abstract: The amoeba of a complex plane algebraic curve has an area bounded above by $\pi^2 d^2/2$. This is a deterministic upper bound due to Passare and Rullgard. In this talk I will argue that if the plane curve is chosen randomly with respect to the Kostlan distribution, then the expected area cannot be more than $\mathcal{O}(d)$. The results in the talk will be based on our joint work in progress with Turgay Bayraktar.

Date: 15 April 2022, Friday

Time: 15:40 (GMT+3)

Place: Zoom

To request the event link, please send a message to sertoz@bilkent.edu.tr