

An Introduction to Toric Pluripotential Theory

Sibel Şahin Mimar Sinan Fine Arts University

Abstract: In this talk we will consider the finite energy classes of quasiplurisubharmonic (qpsh) functions in the setting of toric, compact, Kähler manifolds. Firstly we will see that we can associate each qpsh function φ on (X, ω) with a convex function F_{φ} in \mathbb{R}^n and another convex function G_{φ} (which happens to be the Legendre transform of F_{φ}) on the associated Delzant polytope P. Then for the rest of the talk, we are going to show how the growth and singularity behaviour of one of these components affects the behaviour of the other two in their respective domains. This is a joint work with Dan Coman (SU), Vincent Guedj (IMT) and Ahmed Zeriahi (IMT).

Date: Wednesday, April 25, 2018

Time: 13:30

Place: TB 130, Boğaziçi University