JESSE HULSE, University of Manitoba

A Formula for the Pluricomplex Green Function of the Bidisk

A formula for the pluricomplex Green function of the bidisk with two poles of equal weights will be derived. We divide the bidisk into two open regions, where the formula is found explicitly on the first region, and the other region is the union of a family of hypersurfaces. Time permitting, the newly derived formula will be used to find a formula for the Caratheodory metric on the symmetrized bidisk (up to a fourth degree polynomial) that matches Agler and Young's formula but without the supremum.