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Marisa Zymonopoulou* (marisa@math.missouri.edu), Dept of Mathematics, Yost Bld, 10900 Euclid Avenue, Cleveland, OH 44106. *The complex Busemann-Petty problem for arbitrary measures.*

ABSTRACT

The complex Busemann-Petty problem asks whether origin symmetric convex bodies in \mathbb{C}^n with smaller central hyperplane sections necessarily have smaller volume. The answer is affirmative if $n \leq 3$ and negative if $n \geq 4$. We show that the answer remains the same if the volume is replaced by an “almost” arbitrary measure. (Received August 18, 2008)