

1042-52-166

Deping Ye* (dxy23@case.edu), 10900 Euclid Avenue, Cleveland, OH 44106. *Geometric interpretation of L_p affine surface area.*

L_p Brunn-Minkowski theory is a rapidly growing field with L_p affine surface area -which has applications e. g. in the theory of valuations and approximation of convex bodies by polytopes- at its core.

In this talk, I will present new geometric interpretations of L_p affine surface area: via the convex surface body and the **not necessarily convex** illumination surface body. (Received August 18, 2008)