

1098-52-274

Vlad Yaskin* (yaskin@ualberta.ca). *Counterexamples to convexity of k -intersection bodies.*

It is a well-known result due to Busemann that the intersection body of an origin-symmetric convex body is also convex. Koldobsky introduced the notion of k -intersection bodies. We show that the k -intersection body of an origin-symmetric convex body is not necessarily convex if $k > 1$. (Received January 27, 2014)