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极体的体积确定凸体

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Determination of a convex body by the volume of its polar bodies

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摘要 利用球面调和函数和\,Hamburger\,矩方法, 证明了, ${\mathbb{R}}^{n}$\,中一个包含半径为\,δ\,的球的原点对称凸体, 能被其在此球附近的所有点的极体的体积所唯一确定.

关键词: 凸体 体积 极体

Abstract: Using tools of spherical harmonics and Hamburger's moment, we proved that an origin-symmetric convex body containing a sphere of radius δ in its interior is determined in ${\mathbb{R}}^{n}$ by the volume of its polar bodies with respect to all the points near the sphere.

Key words: convex body volume polar body

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