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Illumination number of the unconditionally symmetric 4-dimensional cap body of a ball

Cap body of a ball in \mathbb{E}^d (as introduced by Minkowski in 1903) is a convex hull of an origin centered euclidean closed unit ball $B^d(o)$ and a countable set of points outside of the ball $\{p_1, p_2, \dots\} \in \mathbb{E}^d \setminus B^d(o)$ such that for any two points p_i, p_j the segment $[p_i, p_j]$ has a nonempty intersection with $B^d(o)$.

Unconditionally symmetric convex body in \mathbb{E}^d is a body that together with every its point with coordinates (x_1, \dots, x_d) also contains all the points with coordinates $(\pm x_1, \dots, \pm x_d)$. In my talk I will show that 8 illumination directions are enough to completely illuminate the boundary of an unconditionally symmetric cap body of a ball in \mathbb{E}^4 .