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*Illumination number of the unconditionally symmetric 3-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 one of 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 6 illumination directions are enough to completely illuminate the boundary of an unconditionally symmetric cap body of a ball in  $\mathbb{E}^3$ .