1139-52-522Alexey Glazyrin* (alexey.glazyrin@utrgv.edu), One West University Boulevard, BLHSB2.520, Brownsville, TX 78520. Covering with convex homothets.

The talk is devoted to various problems on coverings with homothets of a given convex body. In particular, necessary conditions on the homothety coefficients are analyzed and their connections with illumination problems are established. Two new results on coverings by spheres will be also presented. (Received February 19, 2018)