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Vladyslav Yaskin* (yaskin@ualberta.ca) and **Ning Zhang**. *Non-central sections of convex bodies*. Preliminary report.

In recent years a lot of attention has been attracted to the following open problem, suggested by Barker and Larman. Let K and L be convex bodies in \mathbb{R}^n ($n \geq 2$) that contain a Euclidean ball B in their interiors. If $\text{vol}_{n-1}(K \cap H) = \text{vol}_{n-1}(L \cap H)$ for every hyperplane H tangent to B , does it follow that $K = L$? I will talk about some modifications of this problem. (Received September 02, 2014)