1123-52-105 **Liran Rotem***, Vincent Hall, University of Minnesota, Minneapolis, MN 55455. *Geometric means and geometric Banach limits.*

Last year I gave a seminar talk at the IMA about geometric means of convex bodies (which was joint work with Vitali Milman). In this talk I would give a short update about this subject.

More concretely, we will construct a geometric Banach limit, which is a self-consistent way to assign a limit to any uniformly bounded sequence of convex bodies. Surprisingly, this newly defined notion of geometric mean will play a role in this construction.

In the opposite direction, we will show how to use a geometric Banach limit in order to construct a variant of the geometric mean that has some desirable properties. We will also discuss the question of uniqueness. (Received August 20, 2016)