



Polytopes, Rings, and Varieties

Ten Lectures – Ten Open Problems / October-November 2016, Tbilisi State University

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The ten* lectures will be on topics from the very frontier of current research at the crossroads of discrete convex geometry, algebraic combinatorics, algebraic geometry, and topology. Each lecture will feature well-known open problems which have attracted considerable interest recently. The progress being made these days on these challenges is impressive, yet there is much room even for newcomers for making impact and even a decisive contribution. The involved techniques draws from elementary geometry, abstract machinery of algebraic geometry and topology, and algorithms – in the form of crucial computer experimentation.

We will not strive for the maximal generality or formal treatment, more emphasize will be put on geometric intuition; possibilities for individual research projects will be offered.

Information will be continually updated at the URL:

<http://math.sfsu.edu/gubeladze/classes/fall2016/Tbilisi16/Tbilisi16.htm>

The prerequisites will be kept to minimum, the one which is a must is **ΑΓΕΩΜΕΤΡΗΤΟΣ ΜΗΔΕΙΣ ΕΙΣΙΤΩ!**



<http://math.sfsu.edu/gubeladze>

(* the numbers subject to minor changes)