

Pure Mathematics Seminar

Parallelohedra and the Voronoi Conjecture

Dr. Alexey Garber
SMSS, UTRGV

A parallelohedron is a d -dimensional polytope which can tile the d -dimensional Euclidean space with translated copies. In 1909 Voronoi conjectured that every parallelohedron is an affine image of a Dirichlet-Voronoi polytope for some lattice. Since Voronoi stated his conjecture there were several results for different families of parallelohedra but the conjecture remains unproved in the general case.

In this talk we will discuss some of the mentioned results and the way they were achieved. Furthermore we will discuss some other problems related to parallelohedra theory and the Voronoi conjecture.

Date: **Friday, February 12, 2016**

Time: **3:00 pm**

Place: **Edinburg:** MAGC 1.302, **Brownsville:** UBLB 2.206

The talk will delivered live at the *Edinburg* campus and will be streamed to the Brownsville campus

Coffee and cookies will be served.

For further information or for special accommodations, please contact Dr. Sergey Grigorian via email at [sergey.grigorian@utrgv.edu], or Dr. Alexey Garber at [alexey.garber@utrgv.edu]