

TEMPLE UNIVERSITY MATHEMATICS COLLOQUIUM

Igor Pak

University of Minnesota

will speak on

Inflating polyhedral surfaces

ABSTRACT: Can you have a non-convex polyhedron with bigger volume than a convex polyhedron with isometric surface? Imagine you start blowing air into a polyhedron with a bendable but non-stretchable surface. What can be said about the limiting shape? These are the key questions I will consider. I will start the talk by discussing the history of the problem, presenting examples, and surveying earlier work on realization of surfaces. In the second part of the talk I will discuss my recent results on volume-increasing deformations of polyhedral surfaces.

MONDAY, 27 APRIL 2009

LECTURE AT 4:00 PM

COFFEE, TEA, AND REFRESHMENTS FROM 3-5 PM

ROOM 617, WACHMAN BUILDING

DEPARTMENT OF MATHEMATICS