

Geometry Seminar  
Tuesday, April 28, 2009  
Room 317 WWH at 6:00 P.M.

# Inflating polyhedral surfaces

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Can you have a non-convex polyhedron with a bigger volume than a convex polyhedron with the 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.

For more information please visit the seminar website at:  
[http://www.math.nyu.edu/seminars/geometry\\_seminar.html](http://www.math.nyu.edu/seminars/geometry_seminar.html).