## Department of Mathematics and Computer Science

Friday, September 4, 2015, 4:10 pm

COLLOQUIUM TALK

Speaker: Gregory Galperin
Old Main 2231

## Construction of Antipodal Points on a Sphere by Compass and Straightedge

## Abstract:

Suppose we have a sphere (a globe) and a plane, on which we can draw circles by compass, and straight lines by straightedge (only in the plane). How to construct a segment in the plane congruent to the diameter of the sphere? How to construct antipodal points on the sphere? How to draw a dense set of points on the meridian passing through the North Pole N and a given point A on the northern hemisphere?

The speaker will solve these problems both for Euclidean and Lobachevskian (hyperbolic) space.

SNACKS IN FACULTY LOUNGE AT 3:30 PM. EVERYONE WELCOME (EVEN IF YOU ARE UNABLE TO ATTEND THE TALK)