

## Department Colloquium

Speaker: Peter Taylor, Queen's University

Date: Friday, September 23

Time: 2:30 p.m.

Place: Jeffery 234

Title: What everyone needs to know about Grade 10 Math

**Abstract:** The objective of Project Math 9-12 is to create a high school math curriculum based on principles of design and construction. Of course the kind of structures one wants to build are those that are elegant, beautiful or sophisticated (some of my favorite words), so we want to work with math problems that have this character. An example of a math curriculum that does not appear to have this character is found in the Ontario Grade 10 Academic Math curriculum. It has three strands: Quadratic Functions, Analytic Geometry and Triangle Trigonometry. Last July we ran a camp with 17 students developing a unit based on linear transformations designed to replace the last two of these strands -- 2/3 of a high school course. I will give some examples of the problems we used and demonstrate the software that we developed, seen in the picture above, to support the students in their design/construction activities.