Items for the Info Sheet should reach Anne (burnsa@mast.queensu.ca) by noon on Monday. The Info Sheet is published every Tuesday.

**Wednesday, September 24, 3:00 p.m. Jeffery 319**

Curves Seminar  
Speaker: Gregory G. Smith  
Title: Homology  
Abstract: We will define and explore the fundamental properties of the homology functor on the category of complexes.

**Thursday, September 25, 3:30 p.m. Jeffery 319**

CYMS Seminar  
Speaker: Alex Molnar  
Title: Higher dimensional intermediate Jacobians  
Abstract: We address computing intermediate Jacobians associated to our non-rigid Calabi-Yau threefolds.

**Friday, September 26, 11:30 a.m. Jeffery 422**

Number Theory Seminar  
Speaker: Akshaa Vatwani  
Title: Selberg’s sieve  
Abstract: The Selberg sieve is a combinatorial upper bound sieve developed by Atle Selberg in 1947.
We will discuss this sieve, some applications and generalizations.

**Monday, September 29, 4:30 p.m. Jeffery 319**  
**Algebraic Geometry Seminar**

**Speaker:** Brian Harbourne  
**Title:** Using, Computing, and Bounding Waldschmidt Constants

**Abstract:** Motivated by work in number theory, in the 1970s Waldschmidt defined an asymptotic measure of the least degree of a polynomial ideal in $n$ variables with given order of vanishing on a finite set of points in projective space. In the case of generic points in $P^2$, determining the value of Waldschmidt's constant is equivalent to an open conjecture of Nagata. Recent work has related Waldschmidt's constant to an ideal containment problem: which symbolic powers of the ideal of the points are contained in a given power of the ideal? Waldschmidt constants are also relevant to an open question of Eisenbud and Velasco. Joint work with E. Guardo and A. Van Tuyl generalizes some of this work from points to lines in projective 3-space. Additional joint work with M. Dumnicki, T. Szemberg and H. Tutaj-Gasin'ska extends this to r-planes in projective N-space.