



April 5, 2011

QUEEN'S UNIVERSITY AT KINGSTON
Department of Mathematics and Statistics
<http://www.mast.queensu.ca>

CALENDAR		
Wednesday, April 6	Curves Seminar Time: 4:00 p.m. – 5:30 p.m. Place: Jeffery 319	Speaker: Greg Smith Title: Syzygies of algebraic varieties VII Abstract Attached
Thursday, April 7	Conference Room Time: 10:00 a.m. Place: Jeffery 521	Ph.D. Oral Student: Adam Felix Title: Variations on Artin's Primitive Root Conjecture Supervisor: R. Murty
Thursday, April 7	Math Club Time: 5:30 p.m. – 6:30 p.m. Place: Jeffery 118	Speaker: Serdar Yüksel Title: Decision making under uncertainty Abstract Attached
Friday, April 8	Number Theory Seminar Time: 11:30 a.m. – 12:20 p.m. Place: Jeffery 422	Speaker: Amir Akbary, University of Lethbridge Title: A geometric variant of the Titchmarsh divisor problem Abstract Attached
Friday, April 8	Department Colloquium Time: 2:30 p.m. – 3:30 p.m. Place: Jeffery 234	Speaker: Amir Akbary, University of Lethbridge Title: Artin prime producing polynomials Abstract Attached
Friday, April 15	Conference Room Time: 9:30 a.m. Place: Jeffery 521	Ph.D. Oral Student: Shan Jiang Title: Statistical Inference for the Treatment Effect in Cancer Clinical Trials Supervisor: D. Tu

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

To be included on the exam cover page: PLEASE NOTE: "Proctors are unable to respond to queries about the interpretation of exam questions. Do your best to answer exam questions as written."

Wednesday, April 6, 4:00 p.m. Jeffery 319

Curves Seminar

Speaker: Greg Smith
Title: Syzygies of algebraic varieties VII

Abstract: We will conclude the semester by discussing Castelnuovo-Mumford regularity, its connections with ----- the syzygy questions we have been considering, and further open directions.

Thursday, April 7, 5:30 p.m. Jeffery 118

Math Club

Speaker: Serdar Yüksel
Title: Decision making under uncertainty

Abstract: In many applications, a decision maker needs to make a sequence of decisions (that is, select an action from a given set of possible choices for every decision) to control a sequence of events, both

deterministically (for sequences whose paths are uniquely determined given an initial state and actions) or stochastically (for sequences which are also subjected to external randomness).

We will make some definitions regarding such controlled stochastic sequences, discuss the importance of information, classify decision strategies and show that optimal policies minimizing a general class of cost functions satisfy certain properties. In view of these, some examples will be discussed.

Friday, April 8, 11:30 a.m. Jeffery 422

Number Theory Seminar

Speaker: Amir Akbary

Title: A geometric variant of the Titchmarsh divisor problem

Abstract: We formulate a geometric analogue of the Titchmarsh Divisor Problem in the context of elliptic curves and more generally for abelian varieties. For any abelian variety A defined over the rationals, we study the asymptotic distribution of the primes which split completely in the division fields of A . This is a joint work with Dragos Ghioca (UBC).

Friday, April 8, 2:30 p.m. Jeffery 234

Department Colloquium

Speaker: Amir Akbary

Title: Artin prime producing polynomials

Abstract: In 1957, amateur mathematician Raymond Griffin claimed that 10 is a primitive root for all primes produced by the polynomial $10n^2+7$. In this talk we discuss the works of Lehmer (1963) and Moree (2007) related to this claim and explain the relation of such problems with Artin's primitive root conjecture. We describe an algorithm that produces an integer g and a prime producing polynomial $f(n)$ such that g is a primitive root for a very large proportion of primes produced by $f(n)$. We also present some results we obtained in a joint work with Keilan Scholten (University of Lethbridge).