

TEMPLE UNIVERSITY MATHEMATICS COLLOQUIUM

Peter Symonds

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will speak on

Group actions on polynomial rings

ABSTRACT: We consider a group acting on a polynomial ring over a finite field and try to understand the ring as a module for the group. From computer calculations we are led to a theorem that describes a very rigid structure with several surprising consequences. For example, if we can compute the representation up to a certain explicit degree then we can write it down in every higher degree, turning what looks like an infinite problem into a finite one. We can also give an a priori bound on the degrees of the generators of the invariant subring.

MONDAY, APRIL 24, 2006

LECTURE AT 4:00 PM (#)

COFFEE, TEA, AND REFRESHMENTS FROM 3-5 PM

ROOM 617, WACHMAN BUILDING
DEPARTMENT OF MATHEMATICS