$\mathbf{T}_{\text{EMPLE}} \; \mathbf{U}_{\text{NIVERSITY}} \; \mathbf{M}_{\text{ATHEMATICS}} \; \mathbf{C}_{\text{OLLOQUIUM}}$

Frauke Bleher

University of Iowa

will speak on

Group actions on homogeneous quotients of polynomial rings

ABSTRACT: This talk is about how a finite group G can act by linear ring automorphisms on a homogeneous quotient A of a polynomial ring over a field k. The main question in this area is whether as a module over the group algebra kG, A can always be written as a direct sum of copies of a finite number of kG-modules. I will describe what is known about this problem and present some new results proved with T. Chinburg using algebraic geometry.

> Monday, October 10, 2005 Lecture at 4:00 pm (\$) Coffee, tea, and refreshments from 3-5 pm Room 617, Wachman Building Department of Mathematics