CCSU DEPARTMENT OF MATHEMATICAL SCIENCES

COLLOQUIUM

Friday, November 4 2:00 – 3:00 PM Maria Sanford, Room 101

POLYTOPES, VARIETIES, AND VECTOR BUNDLES

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Abstract

I will show how one can associate to a polytope a ring and equivalently a line bundle on an algebraic variety. We will see that the ring is always finitely generated. Similarly, one can associate a ring to a vector bundle on such a variety. I will discuss properties of these rings and show that they need not be finitely generated.

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