



COLUMBIA UNIVERSITY  
DEPARTMENT OF MATHEMATICS

**ELLIS R. KOLCHIN  
MEMORIAL  
LECTURE**

**Prof. Christopher Hacon  
(University of Utah)**

*“Which Powers Of A Holomorphic  
Function Are Integrable?”*



“Let  $f = f(z_1, \dots, z_n)$  be a holomorphic function defined on an open subset  $P \in U \subset \mathbb{C}^n$ . The log canonical threshold of  $f$  at  $P$  is the largest  $s \in \mathbb{R}$  such that  $|f|^s$  is locally integrable at  $P$ . This invariant gives a sophisticated measure of the singularities of the set defined by the zero locus of  $f$  which is of importance in a variety of contexts (such as the minimal model program and the existence of Kähler-Einstein metrics in the negatively curved case). In this talk we will discuss recent results on the remarkable structure enjoyed by these invariants.”

**Thursday, February 19, 2015, at 3 p.m.**

**417 Mathematics Hall  
2990 Broadway at 117th Street**

Tea will be served at 4:00 pm in the Department of Mathematics Rm 508