

Anatomy of a Number

March 13–17, 2006

Lecture 1: Pretentious characters and the
Polya–Vinogradov theorem

Lecture 2: Distribution of smooth numbers

Kannan Soundararajan

ksound@umich.edu

Department of Mathematics

University of Michigan

Ann Arbor, MI 48109

USA

Abstract

Lecture 1:

I will discuss joint work with Andrew Granville, where we obtain a characterization of large character sums. This allows for an improvement of the Polya–Vinogradov inequality for characters of small odd order (e.g. cubic characters).

Lecture 2:

I will discuss some problems on the distribution of smooth numbers.