

**Meeting:** 1004, Bowling Green, Kentucky, SS 9A, Special Session on L-Functions

1004-11-79            **Sankar Sitaraman\*** (ssitaraman@howard.edu), 2400 6th St NW, Math Dept, Howard University, Washington, DC 20059. *p*-divisibility of Bernoulli numbers and diophantine equations.

Let  $p$  be an odd prime. The  $p$ -divisibility of certain Bernoulli numbers (which appear in the special values of L-functions) is related to the structure of the class group of the  $p$ -th cyclotomic field. I will talk about what is known about this and its application to the solvability in integers of certain diophantine equations of Fermat-type. (Received January 17, 2005)