

1014-11-1626

Nathan Kaplan* (nathank@princeton.edu), 933 President St., Brooklyn, NY 11215, and **Carl Erickson, Allison Pacelli, Neil Mendoza** and **Todd Shaylor**. *Class Number Divisibility in Cubic Function Fields*.

We discuss work on prime decomposition and class number divisibility in cubic function fields that was completed this past summer at the SMALL REU at Williams College. Beginning with previous results on prime decomposition in cubic number fields, we discuss extensions of these to cubic function fields, focusing on the prime at infinity. A characterization of function fields with class number divisible by 3 follows from these results. (Received September 28, 2005)