## 1046-11-1092Michael Daub and Jackie Lang\*, jlang@brynmawr.edu, and Mona Merling, Natee Pitiwan,<br/>Allison Pacelli and Michael Rosen. Class Number Indivisibility in Function Fields.

It is known that infinitely many number fields and function fields of any degree m have class number divisible by a given integer n. However, significantly less is known about the indivisibility of class numbers of such fields. There are some results related to the indivisibility of class numbers of quadratic number fields, but the fields are not constructed explicitly. In a recent paper, Pacelli and Rosen explicitly constructed an infinite class of function fields of any degree with class number indivisible by 3, generalizing a result of Ichimura for quadratic extensions. We generalize their method to show that, for an arbitrary prime  $\ell$ , there are infinitely many function fields of any degree with class number indivisible by  $\ell$ . (Received September 14, 2008)