

1086-11-309

**Holley Friedlander, Derek Garton, Beth Malmskog\***  
([elisabeth.malmskog@coloradocollege.edu](mailto:elisabeth.malmskog@coloradocollege.edu)), **Rachel Pries** and **Colin Weir**. *The  $a$ -numbers of Jacobians of Suzuki Curves.*

For  $m \in \mathbb{N}$ , let  $S_m$  be the Suzuki curve defined over  $\mathbb{F}_{2^{2m+1}}$ . It is well-known that  $S_m$  is supersingular, but the  $p$ -torsion group scheme of its Jacobian is not known. The  $a$ -number is an invariant of the isomorphism class of the  $p$ -torsion group scheme. In this talk, I will discuss joint work in which we computed a closed formula for the  $a$ -number of  $S_m$  using the action of the Cartier operator on  $H_0$ .

(Received August 18, 2012)