

1064-20-12

**David H. Gluck\*** (dgluck@math.wayne.edu), 656 W. Kirby St., Detroit, MI 48202. *Rational defect groups and 2-rational characters.*

Let  $D$  be a defect group of a 2-block  $B$  of a finite group  $G$ . We conjecture that if  $D$  is a rational group and  $D' \leq Z(D)$ , then the values of all irreducible characters in  $B$  lie in a cyclotomic field  $Q_m$ , for some odd integer  $m$ . We prove the conjecture when  $G$  is solvable or  $|D|=8$ . Examples show that the condition  $D' \leq Z(D)$  cannot be relaxed. (Received July 22, 2010)