1056-11-666   **Kaneenika Sinha*** (`kaneenik@ualberta.ca`), Department of Mathematics, University of
Alberta, Edmonton, Alberta T6G2G1, Canada. *Ranks of Jacobians of modular curves.*

Let $J_0(N)$ denote the Jacobian variety of the modular curve $X_0(N)$. We obtain upper bounds on ranks of these abelian varieties using arithmetic information about Fourier coefficients of newforms of weight 2 and level N. (Received September 15, 2009)