1046-57-626 Jonathan A Hillman (jonh@maths.usyd.edu.au), Sydney, NSW 2006, Australia, Daniel S Silver* (silver@jaguar1.usouthal.edu), ILB 325, Mobile, AL 36688, and Susan G Williams (swilliam@jaguar1.usouthal.edu), Mobile, AL 36688. Twisted Blanchfield Pairings.

Given a symplectic $SL_{2n}\mathbb{C}$ -representation γ of the group π of a knot k, there is an associated twisted Blanchfield pairing of the first twisted homology module $H_1(X(k);\gamma)$. Consequently, the homology has the form $A \oplus \overline{A}$ (where $\overline{}$ denotes the same module with conjugate $\mathbb{Z}[t^{\pm 1}]$ -structure induced by $t \mapsto t^{-1}$) and the twisted Alexander polynomial $\Delta_{\gamma}(t)$ has the form $f(t)f(t^{-1})$. Using previous work, we see that when $\gamma : \pi \to SL_2\mathbb{C}$ is a nonabelian parabolic representation of the group of a 2-bridge knot, $\Delta_{\gamma}(-1)/\Delta_{\gamma}(1)$ is a square. This confirms a conjecture of the second and third authors, previously proven in a special case by M. Hirasawa and K. Murasugi. (Received September 09, 2008)