1114-57-250   **Allison N. Miller*** (`amiller@math.utexas.edu`), University of Texas, Austin, Department of Mathematics, RLM 8.100, 2515 Speedway Stop C1200, Austin, TX 78712. *Distinguishing mutant pretzel knots in concordance.*

The metabelian twisted Alexander polynomials developed by Kirk and Livingston provide powerful and computationally accessible obstructions to the topological sliceness of knots. In particular, they are among the few invariants known to be capable of distinguishing mutant knots in concordance. Lecuona and Long independently classified the smoothly slice 4-strand pretzel knots up to mutation. They showed that if $K = P(a, b, c, d)$ is smoothly slice then $\{a, b, c, d\} = \{2n, -2n \pm 1, m, -m\}$; that is, K is a mutant of a ribbon knot. However, there is no reason to believe that $K_{n,m} = P(2n, m, -2n \pm 1, -m)$ should be smoothly slice. We show via explicit computation of twisted Alexander polynomials that a large infinite family of these $K_{m,n}$ are not even topologically slice, providing further evidence for the slice-ribbon conjecture for 4-strand pretzel knots. (Received August 29, 2015)