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**Elizabeth A. Sell\*** ([liz.sell@millersville.edu](mailto:liz.sell@millersville.edu)), Department of Mathematics, Millersville University, P.O. Box 1002, Millersville, PA 17551-0302. *On splice quotients of the form  $\{z^n = f(x, y)\}$ .*

The splice quotients, defined by W.D. Neumann and J. Wahl, are an interesting class of normal surface singularities with rational homology sphere links. The universal abelian cover of a splice quotient is a complete intersection surface singularity of a certain type, referred to as splice type. In general, it is difficult to determine whether or not a singularity is analytically isomorphic to a splice quotient, although there are certain necessary topological conditions. Let  $\{z^n = f(x, y)\}$  define a surface  $X_{f,n}$  with an isolated singularity at the origin in  $\mathbb{C}^3$ . We show that for irreducible  $f$ , if  $(X_{f,n}, 0)$  satisfies the necessary topological conditions, then there exists a splice quotient of the form  $(X_{g,n}, 0)$ , where the plane curve singularity defined by  $g = 0$  has the same topological type as the one defined by  $f = 0$ . We also present an example of an  $(X_{f,n}, 0)$  that is not a splice quotient, but for which the universal abelian cover is a complete intersection of splice type together with a non-diagonal action of the discriminant group. (Received August 11, 2008)