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Renee Bell* (rhbell@mit.edu), MIT Department of Mathematics, 77 Massachusetts Ave., Bldg. 2-239A, Cambridge, MA 02139, USA, Cambridge, MA 02139. *Local-to-Global Principles for Galois Covers of Curves in Characteristic p .*

Given a Galois cover of curves $X \rightarrow Y$ with Galois group G which is totally ramified at a point x and unramified elsewhere, restriction to the punctured formal neighborhood of x induces a Galois extension of Laurent series rings $k((u))/k((t))$. If we fix a base curve Y , we can ask when a Galois extension of Laurent series rings comes from a global cover of Y in this way. Harbater proved that over a separably closed field, this local-to-global principle holds for any base curve if G is a p -group, and gave a condition for the uniqueness of such an extension. Using a generalization of Artin-Schreier theory to non-abelian p -groups, we characterize the curves Y for which an extension to a global cover of curves is unique over a more general ground field. (Received September 25, 2017)