

Errata for “On the geometry of p -typical covers in characteristic p ”

Hélène Esnault has observed that Theorem 2.30 is not correct as stated; some limits and colimits need to be interchanged. First, Definition 2.28 must be adjusted: for $Y \rightarrow D$ to be a p -limit, we require that $\operatorname{coker}(F-1, \Gamma(Y, \mathcal{O}_Y))$ be isomorphic to the limit, not the colimit, of the diagram obtained from D by applying the functor $\operatorname{coker}(F-1, \Gamma(*, \mathcal{O}_*))$. Second, Theorem 2.30 should state that $\pi_1^p(Y, \bar{y})$ is a colimit, not a limit, of the diagram obtained from D by applying the functor $\pi_1^p(*)$. (The proof requires essentially no changes.)

Corollary 2.32 remains unchanged, since there is no distinction between limits and colimits for a one-term diagram.

In Example 2.34, the displayed equation is incorrect: one must take the colimit rather than the limit of the diagram. For instance, if R is an algebraically closed field (this example is mentioned in the introduction), one obtains a coproduct rather than a product.

The statement of Corollary 2.35 remains unchanged, but the displayed equation in the proof is incorrect. The first paragraph of the proof of Theorem 2.30 gives the desired result directly.

In the statement of Proposition 4.6, “limit of the diagram” should be “colimit of the diagram”.

Proposition 4.12 remains unchanged, since it follows from Corollary 2.32.