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CORRECTION TO A NOTE ON GALOIS COVERING

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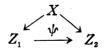
Prof. L.N. Gupta has pointed out the author that there is a gap in the proof of Theorem 2.2 [3]. In this theorem we need to put certain assumptions. To give it, we shall extend to the case of preschemes certain notions defined by Chase, Harrison and Rosenberg in [1].

Let $\sigma, \tau: X \to Z$ be two morphisms of preschemes where X is affine. Then σ and τ are called to be strongly distinct if, for any sum $X \simeq X_1 u X_2$ such that X_i are affine schemes $(i=1, 2), \sigma \varphi$ and $\tau \varphi$ are distinct where φ is the canonical morphism: $X_1 \to X$.

Let X be a Galois covering of a prescheme Y with a Galois group \mathfrak{G} , $\Phi: X \to Y$ the structure morphism and Z an intermediate prescheme between X and Y with the structure morphism $\Phi_1: X \to Z$, $\Phi_2: Z \to X$. We shall say that Z is \mathfrak{G} -strong if there is an affiine open covering $\{V_{\gamma}\}_{\gamma \in I}$ of Y such that for any pair $\sigma, \tau \in \mathfrak{G}$, $\Phi_1 \sigma$ and $\Phi_1 \tau$ are equal or their restrictions to $\Phi^{-1}(V_{\gamma})$ are strongly distinct for all $\gamma \in I$.

One can show that S-strongness is independent on an affine open covering.

Let $\varphi: X \to Y$ be a surjective morphism of preschemes which is finite and locally free. Let Z_1 , Z_2 be two intermediate preschemes between X and Y such that the structure morphisms $\psi_i: Z_i \to Y$ are affine for i=1, 2. Z_1 and Z_2 are said to be isomorphic as intermediate preschemes if there is a Y-isomorphism $\psi: Z_1 \to Z_2$ such that the diagram



is commutative where the unadorned morphisms are structural. We shall call an intermediate covering between X and Y an isomrphism class of intermediate preschemes between X and Y.

A correct form of Theorem 2.2 in [3] can be obtained by strengthening