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Induced Automorphisms of Residuated Function Lattices.

If \mathbf{F} is any lattice of order preserving functions from lattices L to M , and σ is an automorphism of \mathbf{F} , we say that σ is an *induced automorphism* if there exist mappings in $Aut(L)$ and $Aut(M)$ (σ_L , and σ_M respectively), such that $\sigma = \sigma_M \circ \tau \circ \sigma_L$, where τ is a map in \mathbf{F} .

Exploration of the lattice of residuated functions, $Res(L, M)$, illustrates a case where the definition above can be expanded to incorporate induced automorphisms of a second type. For the case when L and M are finite distributive lattices, some results concerning the induced automorphisms of $Res(L, M)$ will be provided and connected to other results found in the literature. (Received September 16, 2014)