

1092-06-137

Erika D. Foreman* (erika.foreman@louisville.edu). *Order Automorphisms of Function Lattices.*

The residuated maps on complete lattices (simply the join homomorphisms) form their own lattice, which we denote $\text{Res}(L)$. In this talk, we explore the order automorphisms on the lattice $\text{Res}(L)$ where L is a finite non-distributive lattice. It's known that left-and-right composition of f in $\text{Res}(L)$ with automorphisms of L yields an order automorphism of $\text{Res}(L)$. It begs the question, then, if all order automorphisms of $\text{Res}(L)$ can be classified as such. We explore this question with some specific examples. (Received August 06, 2013)