

1077-18-2289

Ryan Cohen Reich* (ryanr@math.ucla.edu), 1409 Midvale Ave Apt 210, Los Angeles, CA 90024. *Coherence of canonically-defined natural transformations in the derived category of ℓ -adic sheaves.*

The formalism of the $!$ and $*$ functors with all their adjunctions and natural morphisms is powerful enough that a large proportion of natural transformations appearing in algebraic geometry are constructed solely by combining just these canonical ones. This lends the checking of commutative diagrams a sense of inevitability. We show that this sense is justified: all such diagrams always commute. (Received September 22, 2011)