Gabriele Castellini, Eraldo Giuli Hereditarity of closure operators and injectivity

Comment.Math.Univ.Carolinae 33,1 (1992) 149-157.

Abstract: A notion of hereditarity of a closure operator with respect to a class of monomorphisms is introduced. Let C be a regular closure operator induced by a subcategory \mathcal{A} . It is shown that, if every object of \mathcal{A} is a subobject of an \mathcal{A} -object which is injective with respect to a given class of monomorphisms, then the closure operator C is hereditary with respect to that class of monomorphisms.

 $\mathbf{Keywords:}$ closure operator, hereditary closure operator, injective object, factorization pair

AMS Subject Classification: 18A32, 18G05, 18A20