F. Borceux, G. Janelidze, G.M. Kelly
Internal object actions

Abstract: We describe the place, among other known categorical constructions, of the internal object actions involved in the categorical notion of semidirect product, and introduce a new notion of representable action providing a common categorical description for the automorphism group of a group, for the algebra of derivations of a Lie algebra, and for the actor of a crossed module.