

A glance at topos theory

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Abstract

We introduce (elementary) topos theory from the perspective of categorical logic. We start by recalling some basic concepts in category theory and we develop the first properties of the subobjects classifier and functor. We then proceed to introduce the internal language of a category and we examine the peculiarities of the internal language of an elementary topos. Some remarks on internal methods are made. We finally conclude by seeing the definition of tripos and we discuss Pitts' tripos-to-topos construction.