Branched covers in topos theory

Jonathon Funk

The concept of a branched cover comes from topology. For example, the idea holds a place of importance in the study of 3-dimensional manifolds. Our discussion of branched covers of a topos is based on the theory of complete spreads (in the sense of R. H. Fox) in topos theory from Bunge-Funk ("Spreads and the Symmetric topos", 1995). We define and analyze an appropriate category of branched covers of a topos.