

- ▶ OLIVIA CARMELLO, *Lattices of theories*.

University of Cambridge (UK).

E-mail: O.Carmello@dpms.cam.ac.uk.

We present a duality theorem asserting the existence of a bijection between the subtoposes of the classifying topos of a geometric theory \mathbb{T} over a signature Σ and the closed geometric theories over Σ which are ‘quotients’ of the theory \mathbb{T} ; next, we analyze how classical topos-theoretic constructions on the lattice of subtoposes of a given topos can be transferred, via the duality above, to logical constructions in the corresponding lattice of theories. We also discuss applications of the theorem in various contexts, of syntactic and semantic nature.