

Lawvere's axiomatization of topos theory and Voevodsky's axiomatization of higher homotopy theory exemplify a new way of axiomatic theory building, which goes beyond the classical Hilbert-style Axiomatic Method. The new Axiomatic Method of Lawvere and Voevodsky revives some features of the traditional Euclid's Axiomatic Method, which have been largely abandoned by Hilbert and his followers in the beginning of the 20th century. In my talk I shall describe this new-old Axiomatic Method and develop an analogy between Riemann's idea of intrinsic geometry (of a manifold) and the concept of internal logic of a given category.