

The étale fundamental group of a smooth proper variety over an algebraically closed field of positive characteristic is a profinite group, now known to be finitely presented. In this talk, I will discuss a certain group theoretic property of this profinite group which needs to be satisfied in case the variety has a smooth proper lifting to characteristic 0; I will also discuss examples to show this is not always valid, thus providing a new obstruction to the existence of a lifting. This is a report on joint work with H. Esnault and J. Stix.