The relative philosophy and the field of $\sqrt{p}$ elements

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For group-theoretic applications, I have in my PhD thesis constructed a category which can be morally considered the "category of schemes over the field with $\sqrt{p}$ elements". In this talk, I will first sketch how this construction works. Next I will explain how developing a serious theory of algebraic geometry with such schemes automatically forces us to acquire a better understanding of its categorical origins.