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Sufficient cohesion over atomic toposes. (English, French summaries)

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Assuming [F. W. Lawvere, Theory Appl. Categ. **19** (2007), No. 3, 41–49; MR2369017], the author shows in detail how to construct a class of sufficiently cohesive pre-cohesive toposes over Galois toposes of non-algebraically-closed perfect fields. The construction clarifies the connection between a sort of Nullstellensatz and Hilbert's classical result. Since each geometric morphism $p:\mathcal{E}\to\mathcal{S}$ discussed in the paper is induced by the inclusion of the category of finite extensions of a given field into a category of finitely presented algebras over the same field, one might expect that the same examples could be constructed directly by using a would-be characterization of the morphisms of sites that induce sufficiently cohesive pre-cohesive geometric morphisms. Since such a characterization is not available at present, the author is forced to take a more indirect route by using some results in [P. T. Johnstone, Theory Appl. Categ. **25** (2011), No. 3, 51–63; MR2805745], which studies the Nullstellensatz in the context of connected and locally connected geometric morphisms. *Hirokazu Nishimura*

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Note: This list reflects references listed in the original paper as accurately as possible with no attempt to correct errors.