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Rational place = existentially closed?

Which conditions on a field K guarantee that whenever a function field F over K has a K-rational place, then K will be existentially closed in F? This holds if K is large (also called: "ample") and perfect. Does it also hold without "perfect"? The answer is "yes" if we have local uniformization in positive characteristic. The answer is also "yes" if the place is an Abhyankar place; there is a model-thoretic proof for this, but I have also shown that all Abhyankar places admit local uniformization.

In my talk I will explain all of the notions above and show their relation to model theoretic algebra.