

1145-03-1661      **Florian Pop\*** (pop@math.upenn.edu). *On the strong elementary equivalence vs Isomorphism problem.*

The problem under discussion here is arguably the main open problem in the first-order theory of finitely generated fields, and asks whether every such field  $K$  can be characterized by a single sentence (i.e., axiom) in the language of fields in the class of all finitely generated fields. The answer is obviously "yes" for finite fields, true but not obvious for global fields (proved by Rumely, building on results by Julia Robinson), true but even more difficult for function fields of curves over global fields... The aim of the talk is to comment on the higher dimensional cases, in particular to present a solution to the general problem in characteristic zero. (Received September 23, 2018)