Unspelled corollaries from standard theorems about the field of complex numbers

Abstract:

I will recall Steinitz's characterisation of the field of complex numbers and Artin-Schreier's theorem. These classical facts have some "unexpected" consequences like a nice embedding of the field of non-standard numbers into the field of complex numbers. Also I will discuss the embeddings of the field of real numbers into the field of complex numbers.

The talk is aimed at a wide audience including undergraduate students.