

NON-AMPLE COMPLETE VALUED FIELDS

Arno Fehm

(Tel Aviv University, Tel Aviv)

In modern Galois theory, the so called ample fields play a central role: A field K is ample if it is existentially closed in the field of formal power series $K((t))$.

Fields that are complete with respect to an absolute value or a valuation of finite rank are known to be ample. I will present a construction of a complete valued field of infinite rank that is not ample.

Joint work with Elad Paran.