

Structure and Block Approximation

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A field K is pseudo algebraically closed (PAC) if every absolutely irreducible variety defined over K has a K -rational point. The absolute Galois group of a PAC field is projective. Conversely, every projective profinite group is the absolute Galois group of some PAC field.

There are various generalizations of this result to analogs of PAC fields and to profinite groups with families of special subgroups.

We consider a further generalization: a field K with a family of valuations such that every absolutely irreducible variety defined over K , having rational points in the respective Henselizations has a K -rational point that is, in some sense, close to the points in the Henselizations. We characterize the absolute Galois group of such a field