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## fixed field

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Author djao (24) Entry type Definition Classification msc 12F10 Let K/F be a field extension with Galois group G = Gal(K/F), and let H be a subgroup of G. The fixed field of H in K is the set

$$K^H := \{ x \in K \mid \sigma(x) = x \text{ for all } \sigma \in H \}.$$

The set  $K^H$  is always a field, and  $F \subset K^H \subset K$ .