## 1 Fundamental Theorem of Galois Theory II

**Theorem 1.1.** For  $P \in I(K, L)$  suppose P : K is a normal extension. Then  $G_P \triangleleft G$  and  $\operatorname{Gal}_K P \cong G/G_P$ .

**Lemma 1.2.** Let K - P - L be a tower of fields and  $g \in \operatorname{Aut} L$ . Then  $G_{gP} = gG_Pg^{-1}$ .

CHECK NOTES