1 Fundamental Theorem of Galois Theory II

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

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