

$\mathbb{K} \in \mathbb{N}\mathbb{Z}$ field

$\mathbb{K} \xleftarrow{\sigma} \mathbb{K}$ alg autom

$$\mathbb{C}_{\mathbb{K}} = \frac{\overline{\sigma(x+y) = \sigma x + \sigma y: \sigma(x \cdot y) = \sigma x \cdot \sigma y}}{\quad}$$

subfield $\mathbb{k} \sqsubset \mathbb{K} \in \mathbb{N}\mathbb{Z}$ field

$$\mathbb{G}(\mathbb{K}) \Big|_{\mathbb{k}} = \frac{\sigma \in \mathbb{G}(\mathbb{K})}{\sigma|_{\mathbb{k}} = i}$$