

Osservazione

$$A \in \Gamma_n(K), \quad \det(A) = \det({}^t A)$$

$$\det(A) \stackrel{\text{def.}}{=} \sum_{f \in P_n} \text{sign}(f) \sigma_{f_1}^1 \sigma_{f_2}^2 \dots \sigma_{f(n)}^n$$

$$\begin{aligned} P_n &= \{ f: \mathbb{N}_n \rightarrow \mathbb{N}_n \mid f \text{ biettivo} \} = \\ &= \{ f^{-1}: \mathbb{N}_n \rightarrow \mathbb{N}_n \mid f \in P_n \} \end{aligned}$$