$$\mathbb{F}_q = \mathbb{F}_{p^m}$$

$$m \geqslant 1$$

$$\text{prim } \mathbb{F}_p \sqsubset \mathbb{F}_{p^2} \sqsubset \cdot\cdot \sqsubset \mathbb{F}_{p^m} \sqsubset \cdot\cdot \sqsubset \mathbb{F}_{p^\infty} \text{ alg abg}$$

$$\mathbb{F}_q \sqsubset \mathbb{F}_{q^2} \sqsubset \cdot\cdot \sqsubset \mathbb{F}_{q^m} \sqsubset \cdot\cdot \sqsubset \mathbb{F}_{q^\infty} \text{ alg abg}$$

$$\mathbb{F}_{p^m} \sqsubset \mathbb{F}_{p^{2m}} \sqsubset \cdot\cdot \sqsubset \mathbb{F}_{p^{nm}} \sqsubset \cdot\cdot \sqsubset \mathbb{F}_{p^{\infty m}} = \mathbb{F}_{p^\infty} \text{ alg abg}$$