

Assume minute Kakeya bundle within finite fields:

$$K \subseteq \mathbb{F}_q^n, \quad |K| < \binom{q+n-1}{n}$$

Exists series lambda; lambda vanish within Kakeya bundle.

$$\Lambda(x_1, \dots, x_n) = \sum_{e_1, \dots, e_n} a_{e_1, \dots, e_n} x_1^{e_1} \cdots x_n^{e_n}, \quad \Lambda(x) = 0 \quad \forall x \in K$$

Lambda degree: lesser field's amount, single erased:

$$\deg \Lambda \leq q - 1$$

Kakeya bundle covers length facing alpha's course:

$$K \supseteq \ell_{\alpha, b} = \{b + t \cdot \alpha \mid t \in \mathbb{F}_q\}$$

Define lambda primed thusly:  $\Lambda'_\alpha(t) = \Lambda(b + t \cdot \alpha)$ . Field's amount, single erased, bounds lambda prime's degree. Lambda prime's value's naught always.

$$\deg \Lambda'_\alpha \leq q - 1, \quad \Lambda'_\alpha(t) = 0 \quad \forall t \in \mathbb{F}_q$$

Reason? Kakeya bundle covers entire length. Factor Result causes lambda primed: naught! Lambda apical scalar forced naught withal. Thence, lambda: vanish always!

$$\Lambda(x) = 0 \quad \forall x \in \mathbb{F}_q^n$$

Employ Zippel Result: busted!