

$$Z_{C/F_q}(u) = \frac{P_C(u)}{(1-u)(1-qu)}$$

$$\zeta_K(s) = \chi(s) \zeta_K(1-s)$$

$$\zeta_K(s) = \sum_{D \geq 0} \frac{1}{ND^s}$$

$$\sum_{\substack{f \in \mathbb{F}_q[T] \\ \deg(f) = n \\ f \text{ monic}}} d(f) = q^n (n+1) \rightsquigarrow X \log X + X$$

$$V(z) = \sum \frac{M(z)^2}{z}$$

$$\sum d(f) d(f+1)$$

$$D \in \mathcal{D}_K^+ \Rightarrow D = \sum_P a(P) P$$

$$\#A_d = \frac{X}{f(d)} + \mathcal{O}_d$$

$$g(s) = \sum_{n=1}^{\infty} \frac{a(n)}{n^s}$$

$$\sum_{n \leq x} a(n) = \frac{1}{2\pi i} \int_{(c)} g(z) \frac{x^z}{z} dz$$

$$D = \sum a(n) \underline{\underline{P}}$$