

$$k = \mathbb{F}_{p^e} \subset \bar{k}$$

$$\mathbb{C}_k | \bar{k} = \lim \mathbb{Z} + \underline{\mathbb{Z}n}$$

$$\mathbb{C}_K | \bar{K} \xrightarrow{\text{on}} \mathbb{C}_k | \bar{k}$$

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$$\text{Weil}_K \xrightarrow{\text{on}} \mathbb{Z}$$

$$\text{Rep}_\infty \left({}^d K_d^{\mathbb{C}} \right) = \text{Rep}_d (\text{Weil}_K)$$

$$\mathbb{F} \rtimes {}^d K_d^{\mathbb{C}} \rightarrow \mathbb{F}$$

$$\mathbb{C}_K | \bar{K} \times {}^d K_d^{\mathbb{C}} \rtimes H_{et}^* \left(\mathbb{F} \rtimes \bar{K} : \bar{\mathbb{Q}}_\ell \right)$$