

$$x \sim y \quad \sum_{i=1}^N \mathbb{1}(x_i \neq y_i) = I \quad \left\{ \begin{array}{l} N \\ E(\epsilon) \leq (\frac{1}{\alpha} + L) N \end{array} \right.$$

$$\rho(x, y) = \sum_{i=1}^N \mathbb{1}(x_i \neq y_i) + \max_i \|M(x(i), \cdot) - M(y(i), \cdot)\|_{TV}$$

$$\rho(x, y) = 1 + \|M(x(i), \cdot) - M(y(i), \cdot)\|_{TV} \quad \left\{ \begin{array}{l} M(x(i), \sigma) \\ > M(y(i), \sigma) \\ M(x(i), \sigma) \end{array} \right.$$

$$\mathbb{E} \rho(x, y) = 1 + \left\| \sum_{i=1}^N P_{x(i)-i} \right\|_{TV} + 1$$

