ρ_2
γ
T_{p_1}

$$\rho_2 = Exp_{\rho_1}(\gamma) = cos(|\gamma|)\rho_1 + sin(|\gamma|)\frac{\gamma}{|\gamma|}$$

(1)
ρ_1

$$\gamma = Log_{\rho_1}(\rho_2) = \tilde{\rho}\frac{cos^{-1}(\langle \rho_1, \rho_2 \rangle)}{\sqrt{\langle \tilde{\rho}, \tilde{\rho} \rangle}}$$

(2)
$\tilde{\rho} =$
$\rho_2 -$
$\langle \rho_2, \rho_1 \rangle \rho_1$

$$x_l = \frac{\sum_{i \in X_l} \rho_i}{|| \sum_{i \in X_l} \rho_i ||}, l = 1 \dots K$$

X_h
K
??