



$$p \in \tilde{L}_1$$

$$(p, q_2) \in \tilde{L}_{1,2}$$

$$(p, q_1) \in \tilde{L}_{1,2}$$

$$i_{L_{12}}(p, q_2) = i_{L_{12}}(p, q_1)$$

$$(p, (p, q_1)), (p, (p, q_2)) \in \tilde{L}_2 = \tilde{L}_1 \times_{X_1} \tilde{L}_{12}$$