

$X_{\mathbb{C}}^2$ surface

$$H_2(X; \mathbb{Z}) \cong \sum_i a_i C^i$$

$$a_i \in \mathbb{Z}$$

C^i irred curves

$$C = [\mathcal{L}]$$

$$C|_{C'} = \int_X c_1(\mathcal{L}) \cup c_1(\mathcal{L}') = \int_C c_1(\mathcal{L}') = \int_{C'} c_1(\mathcal{L})$$

Nakai-Moishezon

$$H \text{ ample} \Leftrightarrow \begin{cases} H|_H > 0 \\ H|_C > 0 \quad C \text{ irred} \end{cases}$$