

$$X = \overset{U}{(U_0 \cap U_1)} \cup \overset{V}{(U_0 \cap U_2)} = \mathbb{C}^2 - \{\text{pt}\} \sim S^3 \quad (10)$$

$$U \sim S^2 \quad V \sim S^1$$

$$U \cap V$$

$$0 \rightarrow H_3(X) \rightarrow H_2(U \cap V) \rightarrow 0$$

$$0 \rightarrow H_2(X) \rightarrow H_1(U \cap V) \rightarrow H_1(U) \oplus H_1(V) \rightarrow 0$$

"0

$$\text{Abiamo } H_k(U \cap V) = \begin{cases} \mathbb{R} & k=0, 2 \\ \mathbb{R} \oplus \mathbb{R} & k=1 \\ 0 & k \geq 3 \end{cases}$$