

Joint w/ J. Horn

I. Four-manifolds X^4 w/ $\pi_1 = 0$, closed, oriented

Def $Q_X: H_2 \times H_2 \rightarrow \mathbb{Z}$

Thm (Freudenthal): Every symm. unimod Q comes
from some X

2. If $X_{1,2}$ are smooth $Q_{X_1} \cong Q_{X_2} \iff X_1 \stackrel{h}{\cong} X_2$