

∴ exact

$$0 \leftarrow \frac{H_1(X)}{H_0(X)} \xrightarrow{q} \pi_{loc}(X) \leftarrow [\mathcal{E}^1 M(2/q, 1)_X] \leftarrow \pi_{21c} X \xleftarrow{q} \pi_{21c} X$$

$$\Leftrightarrow \ker \left\{ \pi_{loc}(X) \xrightarrow{q} [\mathcal{E}^1 M(2/q, 1)_X] \right\}$$

$$\begin{array}{c} \hookrightarrow \pi_{21c} X \\ \hline q \pi_{21c} X \end{array}$$

$$\Leftrightarrow \ker \left( \text{hom}(2/q, \pi_{loc}(X)) \leftarrow [\mathcal{E}^1 M(2/q, 1)_X] \right)$$

$$\hookrightarrow \text{Ext}(2/q, \pi_{21c} X) \leftarrow 0$$

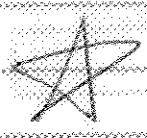
in general:

$$0 \leftarrow \text{hom}(G, \pi_{loc} X) \leftarrow [\mathcal{E}^1 M(G, 1)_X]$$

$$\hookrightarrow \text{Ext}(G, \pi_{loc} X) \leftarrow 0$$

$$X \text{ is local} \Leftrightarrow [\mathcal{E}^1 M(2/q, 1)_X] = 0 \quad \forall q$$

$$\Leftrightarrow \pi_i X \text{ is uniquely } q\text{-divisible} \quad \forall q \in \mathcal{S}$$



$$\Leftrightarrow \pi_0 X \cong \pi_1 X \otimes \mathbb{R}$$