

Dehnung im Stab

$$\varepsilon = \frac{\Delta l}{l} = \frac{u_2}{l} = \varepsilon(u_2)$$

Spannung im Stab

$$\sigma = E \cdot \varepsilon = E \cdot \frac{u_2}{l} = \frac{E}{l} u_2 = \sigma(u_2)$$

Kraft  $F_1$  an Lager 1:  $F_1 = -A \cdot \sigma = -\frac{EA}{l} \cdot u_2$

Kraft  $F_2$  an Lager 2:  $F_2 = -F_1 = \frac{EA}{l} \cdot u_2$

