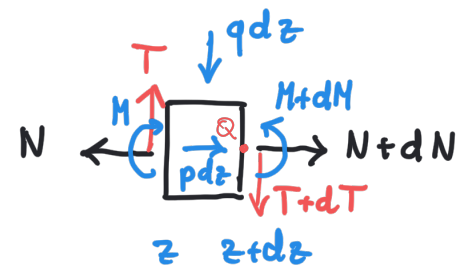


# EQUAZIONI INDEFINITE DI EQUILIBRIO



$$(\rightarrow) -\cancel{N} + \cancel{N} + dN + p dz = 0$$

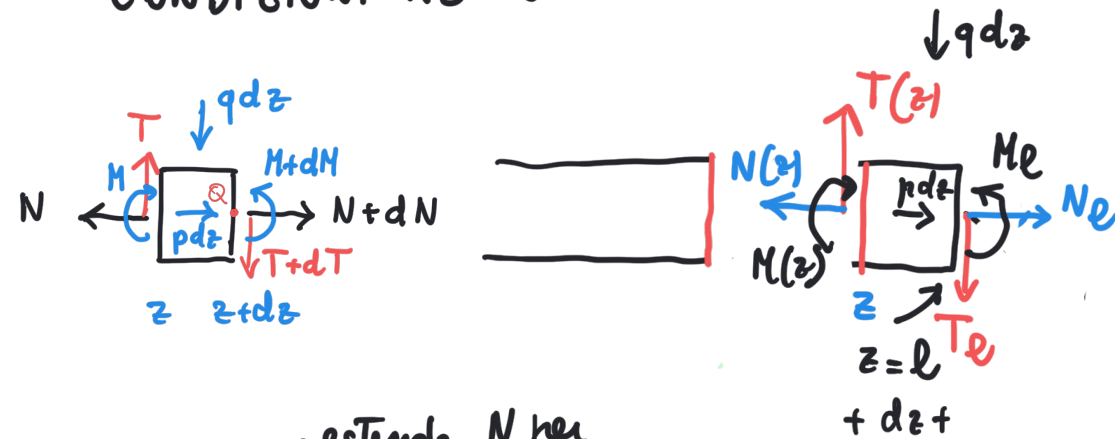
$$(\downarrow) -T + T + dT + q dz = 0$$

$$(\curvearrowright) -M + M + dM - T dz + q dz \frac{dz}{2} = 0$$

$$\begin{aligned} N' + p &= 0 \\ T' + q &= 0 \\ M' - T &= 0 \end{aligned}$$

infinitesimo di ordine  $dz^2$

# CONDIZIONI AL CONTORNO



estendo  $N$  per  
continuità fino  
al bordo

( $\rightarrow$ )  $N(l) = N_e$

$$-N(z) + N_e + p dz = 0$$

$$dz \rightarrow 0 \quad z \rightarrow l$$

$$\lim_{z \rightarrow l} N(z) = N_e$$

( $\downarrow$ )  $T(l) = T_e$

( $\curvearrowright$ )  $M(l) = M_e$

$$N' + p = 0$$

$$T' + q = 0$$

$$M' - T = 0$$

