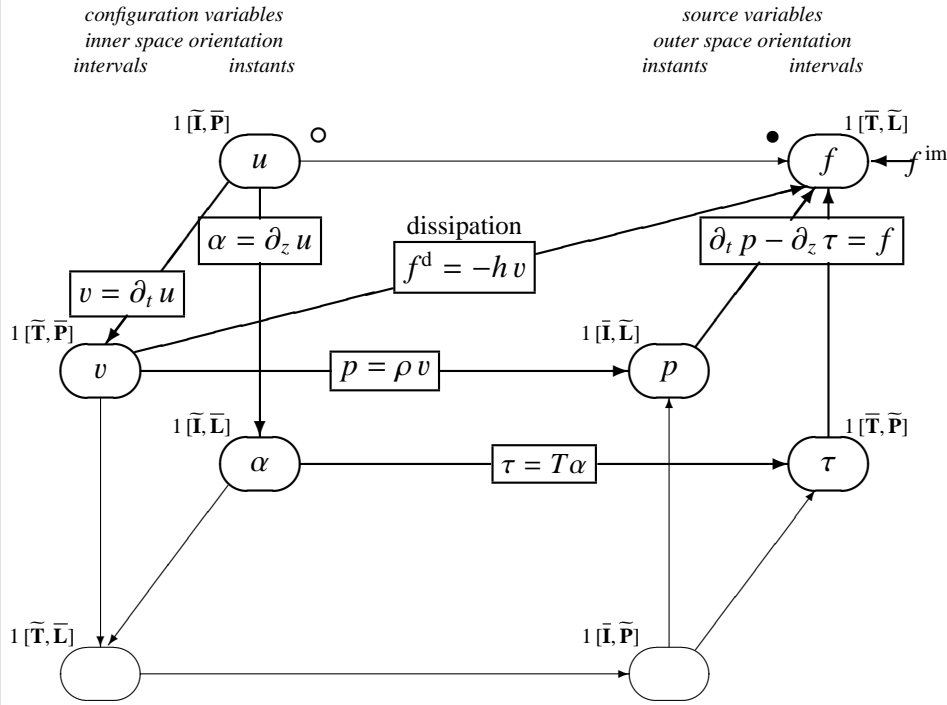


## Transversal vibrations of strings

variables:  $t, z$



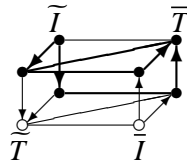
fundamental equation

$$\rho \frac{\partial^2 u}{\partial t^2} - T \frac{\partial^2 u}{\partial z^2} = f^i - h \frac{\partial u}{\partial t}$$

$u$  transversal displacement  
 $v$  transversal velocity  
 $\alpha$  slope

$f$  body force / length  
 $p$  momentum / length  
 $\tau$  transversal component of tension

$\rho$  mass / length  
 $h$  damping coefficient  
 $T$  tension  
 $f^d$  dissipative force / length  
 $f^{im}$  impressed force / length



C'è una figura congelata da mettere nella spiegazione della tavola.