



Outline

- Introduction to Brillouin Scattering
- ➔ • Mechanical modes
- Optical modes
- Harnessing Brillouin interaction
- Optomechanical cavities
- Final remarks



Mechanical modes

$$\frac{\partial}{\partial r_j} \boxed{T_{ij}(\mathbf{r}, t)} = \boxed{\rho_0(\mathbf{r}) \frac{\partial^2 U_i}{\partial t^2}} - \boxed{f_i(\mathbf{r}, t)}$$

Stress tensor acceleration External force