

upcoming schedule

- 24 Sep - Stress Lecture
- 26 Sep - Elastic Solid, HW4 Due
- 1 Oct - Elastic Solid
- 3 Oct - Elastic Solid, HW5 Due

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outline

sections numbered

linear momentum

- From the principle of linear momentum, we know that
 $F = ma$
- If we consider some internal body force, B , and use the knowledge that tractions on opposing faces must be equal, we find (in Cartesian coordinates)

$$T_{ij,j} + \rho B_i = \rho a_i$$

- These are known as Cauchy's equations of motion
- For a body to be in static equilibrium $a_i = 0$

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