

3 Stress and the Balance Principles

Three basic laws of physics are discussed in this Chapter:

- (1) The Law of Conservation of Mass
- (2) The Balance of Linear Momentum
- (3) The Balance of Angular Momentum

together with the conservation of mechanical energy and the principle of virtual work, which are different versions of (2).

(2) and (3) involve the concept of stress, which allows one to describe the action of forces in materials.

