2009 structural analysis with applications to aerospace structures

3 Linear elasticity solutions

1. **(Equalibrium Equations)** describes conditions for a differential element of the body in terms of stress field, a consequence of Newton's Law (1.4 3pde)
2. **(Strain-Displacement / Kinematic Equations)** describes deformation of the body without referencing to forces that create the deformation (1.63, 1.71 6pde)
3. **(constitutive law)** describes behavior of materials under load, linking stress and strain components at a point, which has roots in material science and express an approximation to observed behavior of actual materials. (2.4 2.9 6pde hookes law)

12.1.1 Listing of linear elasticity equations

3.1.1 Beltrami-Michell's equations

13 Summary of yield criterion

1998 continuum mechanics for engineers

3 Beltrami-Michell Equations of Compatibility