

Conservation Laws I

- (a) Interpret the integral form of following equation in terms of a conservation law:

$$\vec{\nabla} \cdot \vec{J} = -\frac{\partial \rho}{\partial t}$$

- (b) Show that the conservation law above follows from Maxwell's equations by calculating the divergence of the curl of \vec{B} .
- Griffiths problem 8.2.