ME 285C Electrodynamics of Continuous Media

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Outline:

1. Electric charges and currents
2. Electromagnetic field, Maxwell’s equations; invariance properties.
3. The aether relations and Lorentz transformations. Wave propagation.
4. Polarization and magnetization in materials.
5. Coupling of electromagnetism with continuum mechanics
8. Variational principles.


Reading:


Grading: Exercises and a term project (to be presented in class at the end of term)