## Intermediate Electricity and Magnetism

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## Remarks

Describing moving charges as in the Lorentz force

## Magnetostatics

- The force on a current due to the magnetic induction
- The torque on a magnetic moment due to the magnetic induction
- Magnetization and Magnetic Moment
- Faraday's law of induction

## Where are we heading?

- Maxwell's equations
- Conservation (of charge, energy and momentum)
- Electromagnetic waves
- Wave guides
- Fields and potentials in electrodynamics
- Radiation.. [and more..]
- We will ultimately need to come back and study subjects that we continue to skip