Exploring electric and magnetic forces using computer simulations

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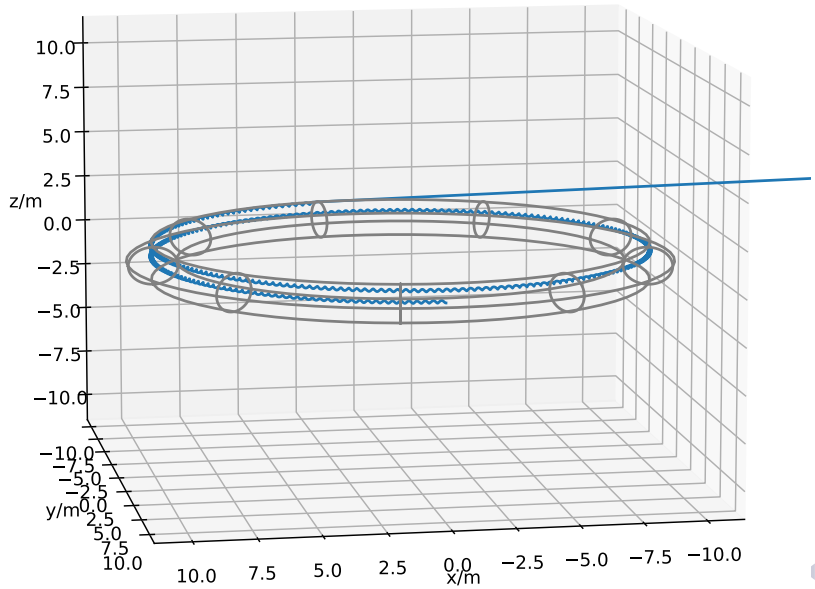

Wellcome

- Todays topic: particles in electric and magnetic fields

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- Todays plan

Introduction (3 minutes)

Theory and background (13 minutes)

Steering particles with $\vec{B}$ fields (14 min)

Introducing Electric fields (10 min)

Conclusion and Questions(5 min)

Introduction, what and why

- (Classical) Charged particles in Electric and Magnetic fields

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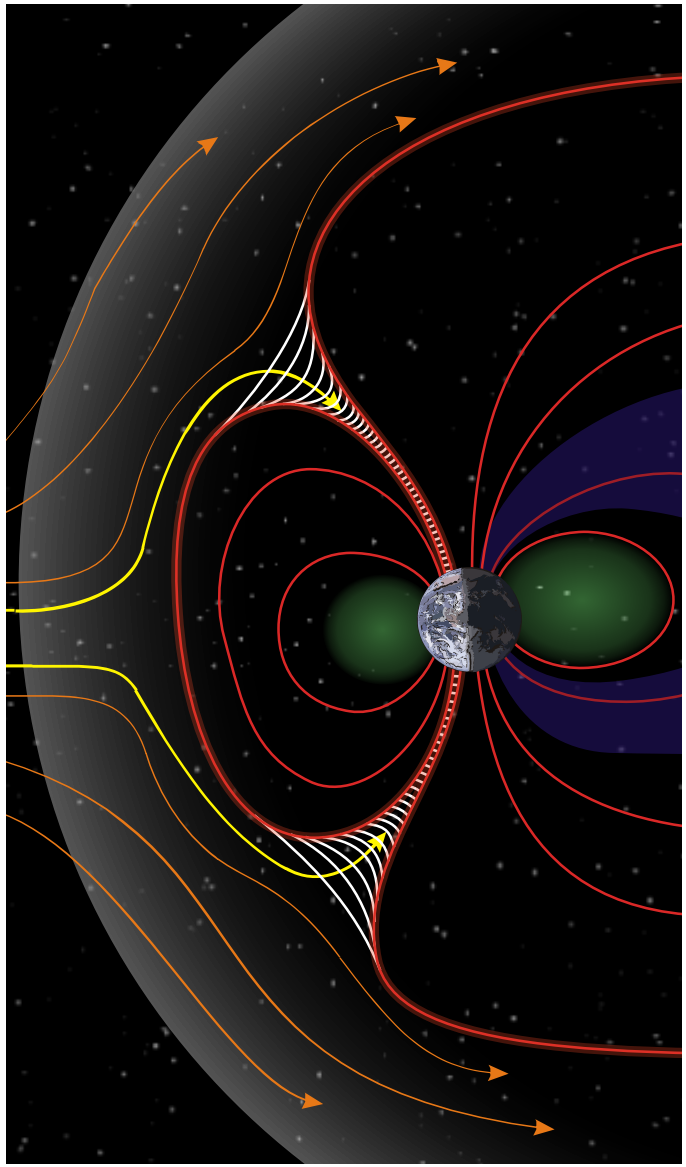
- How can magnetic fields steer and collect particles



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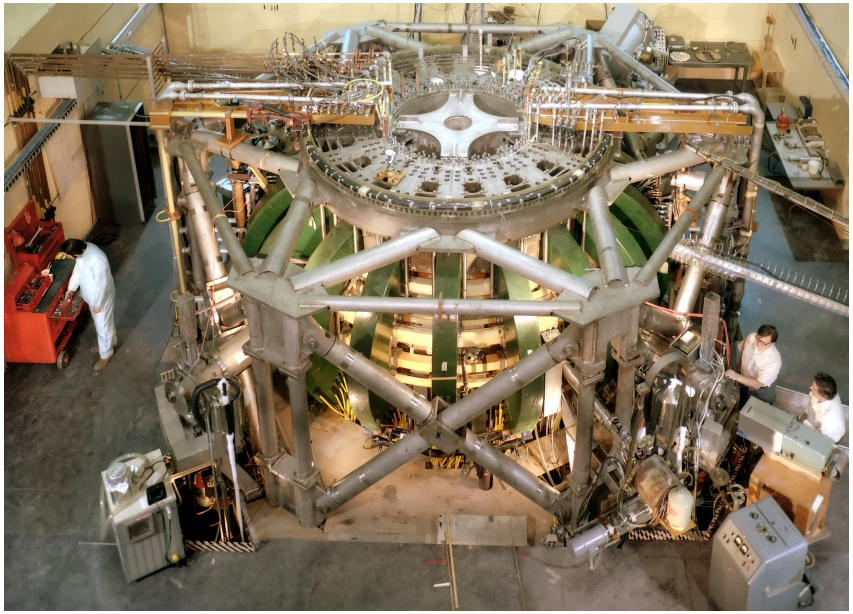
Introduction, what and why

- (Classical) Charged particles in Electric and Magnetic fields
- How can magnetic fields steer and collect particles
- Real world examples:
  - Magnetic traps: "Tokamak" style fusion reactors.



Princeton Large Torus in 1975, image in Public Domain