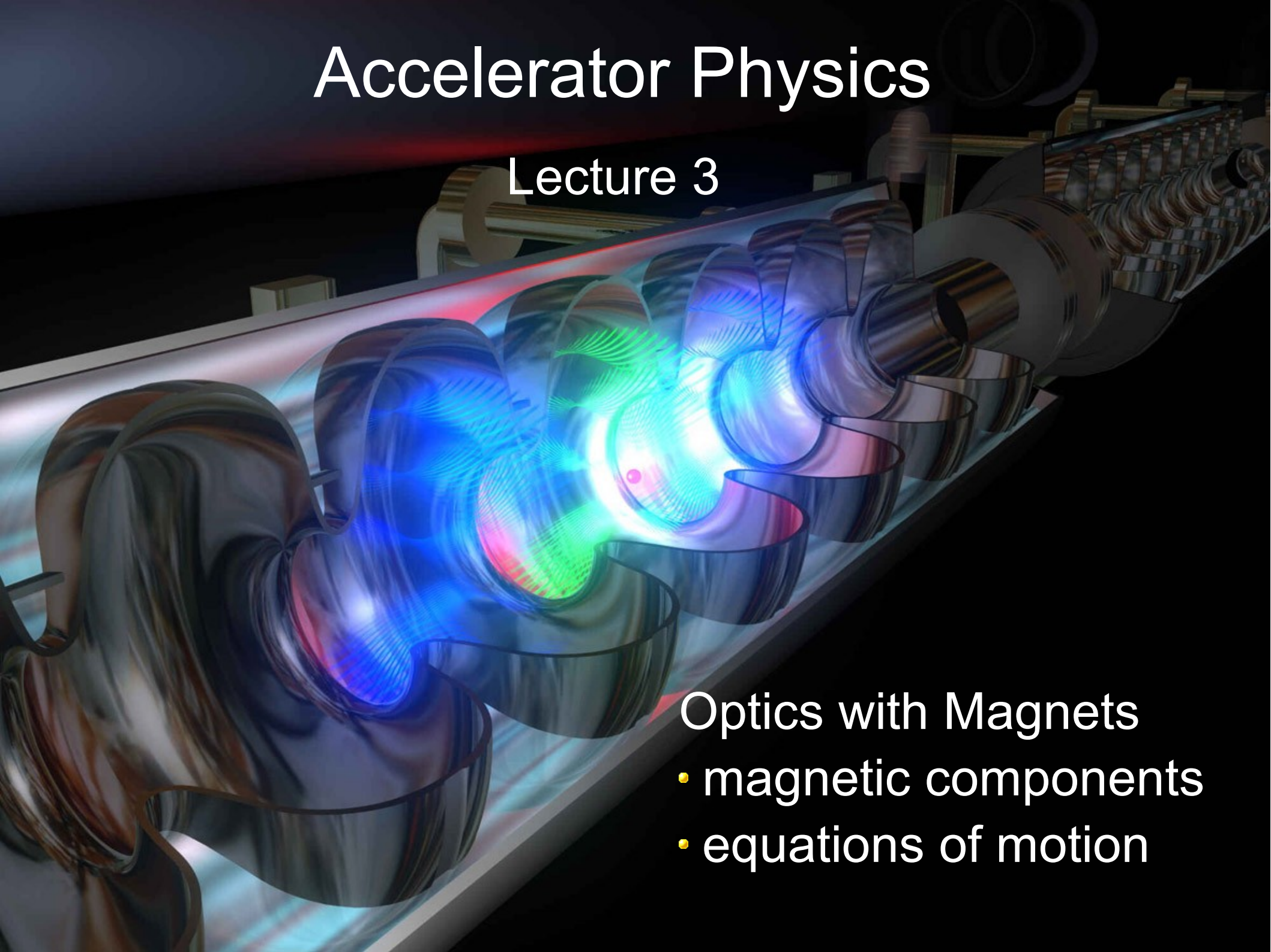


Accelerator Physics

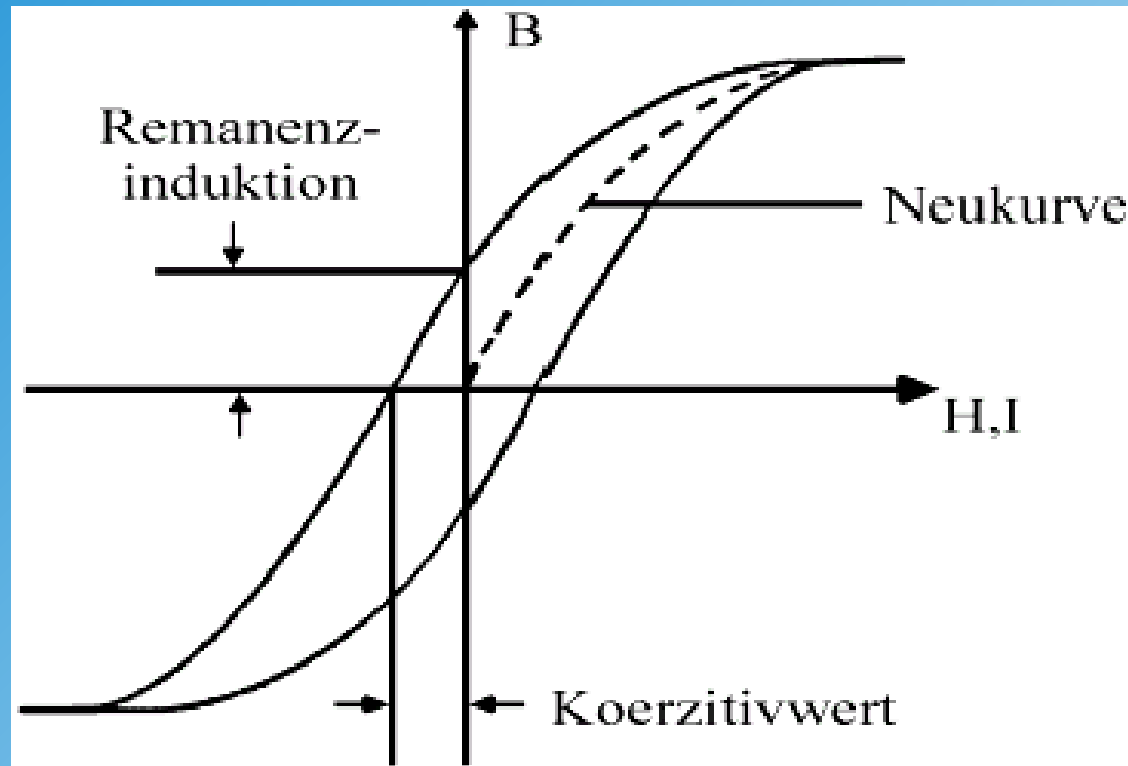
Lecture 3



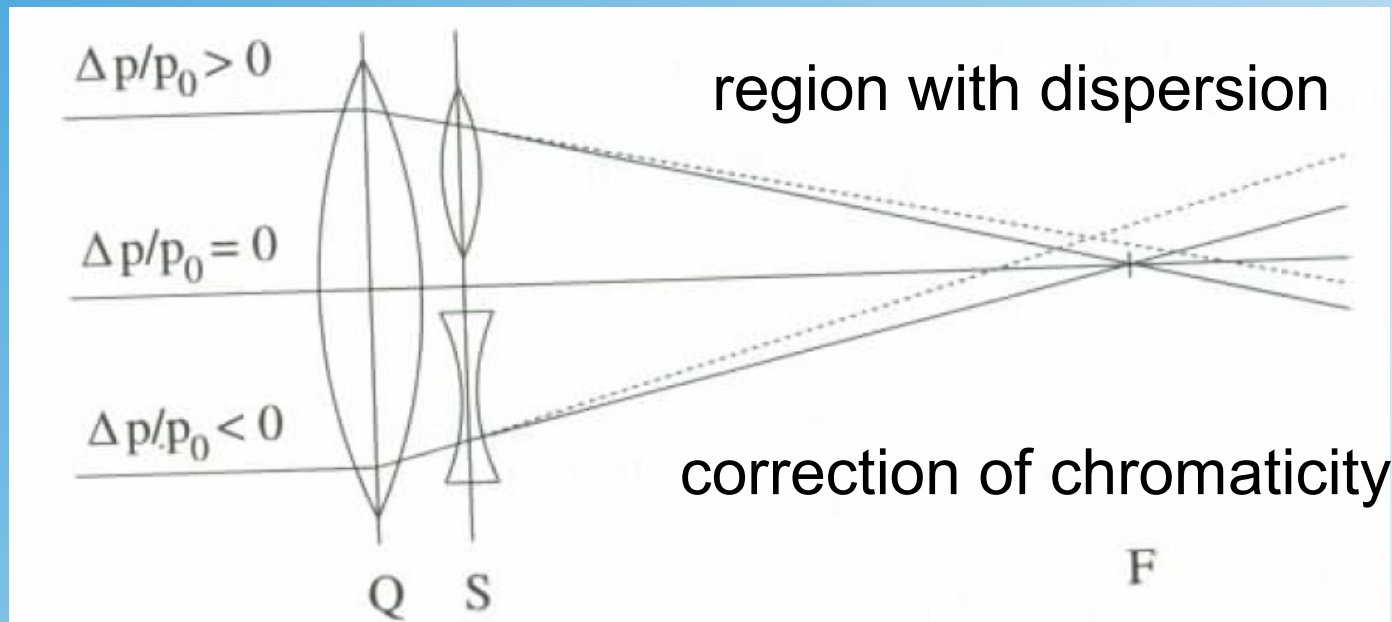
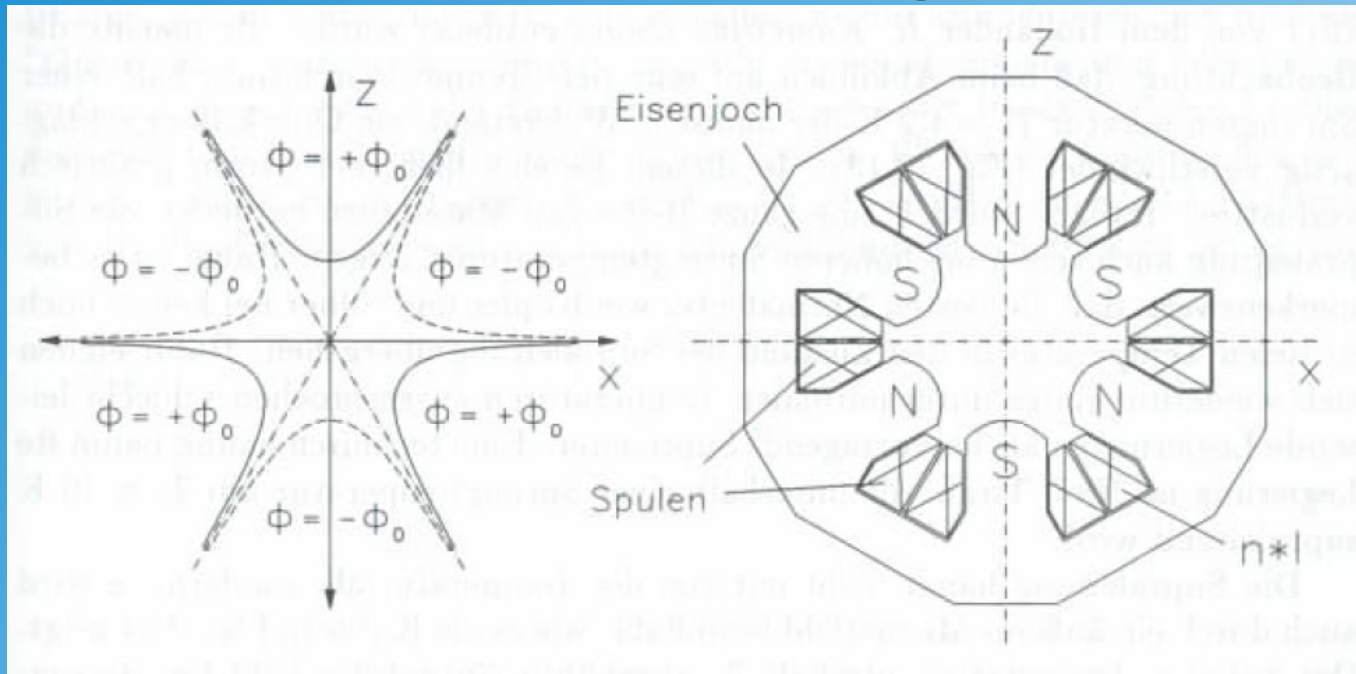
Optics with Magnets

- magnetic components
- equations of motion

Magnetic Hysteresis

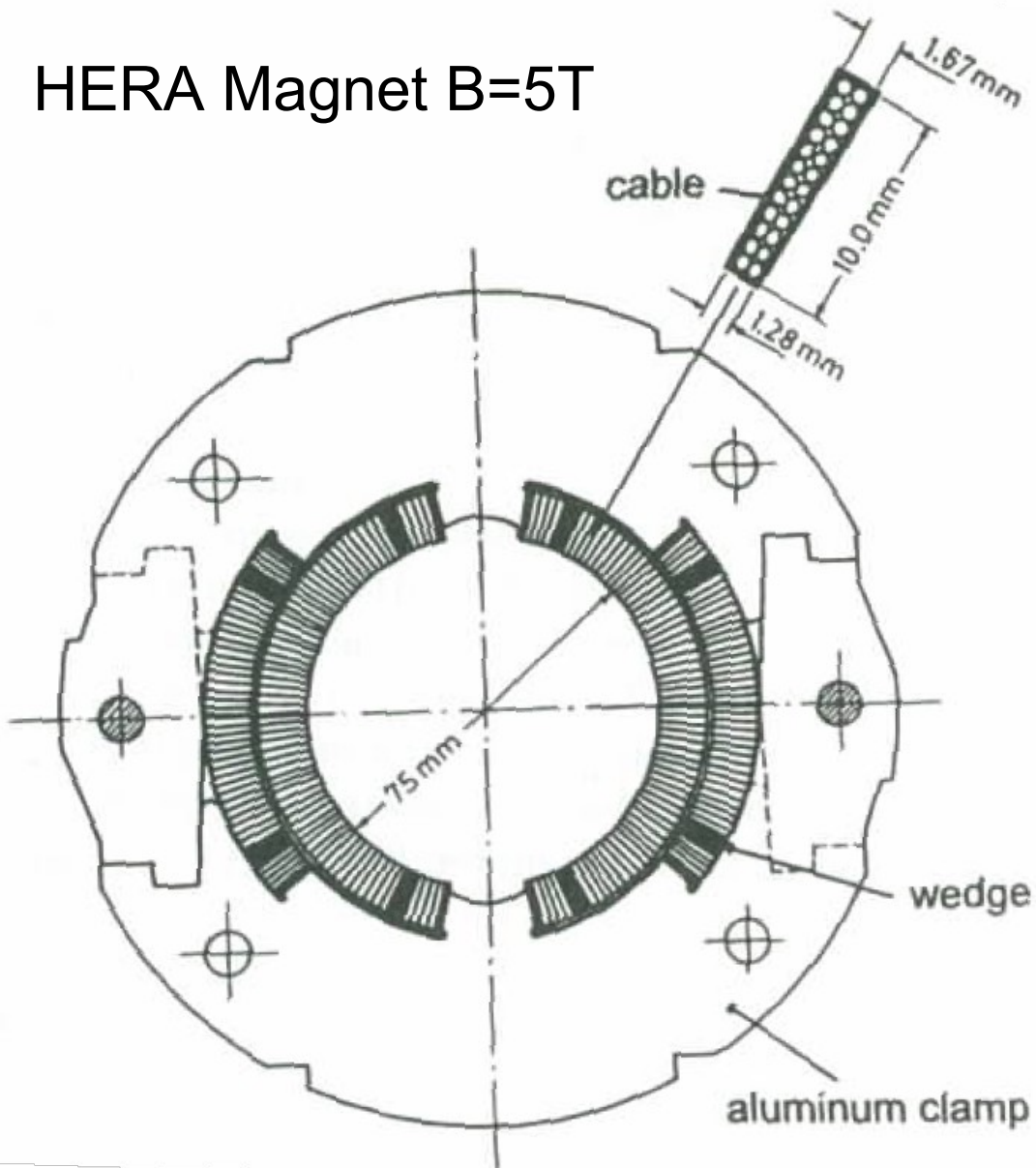


Sextupole Magnet



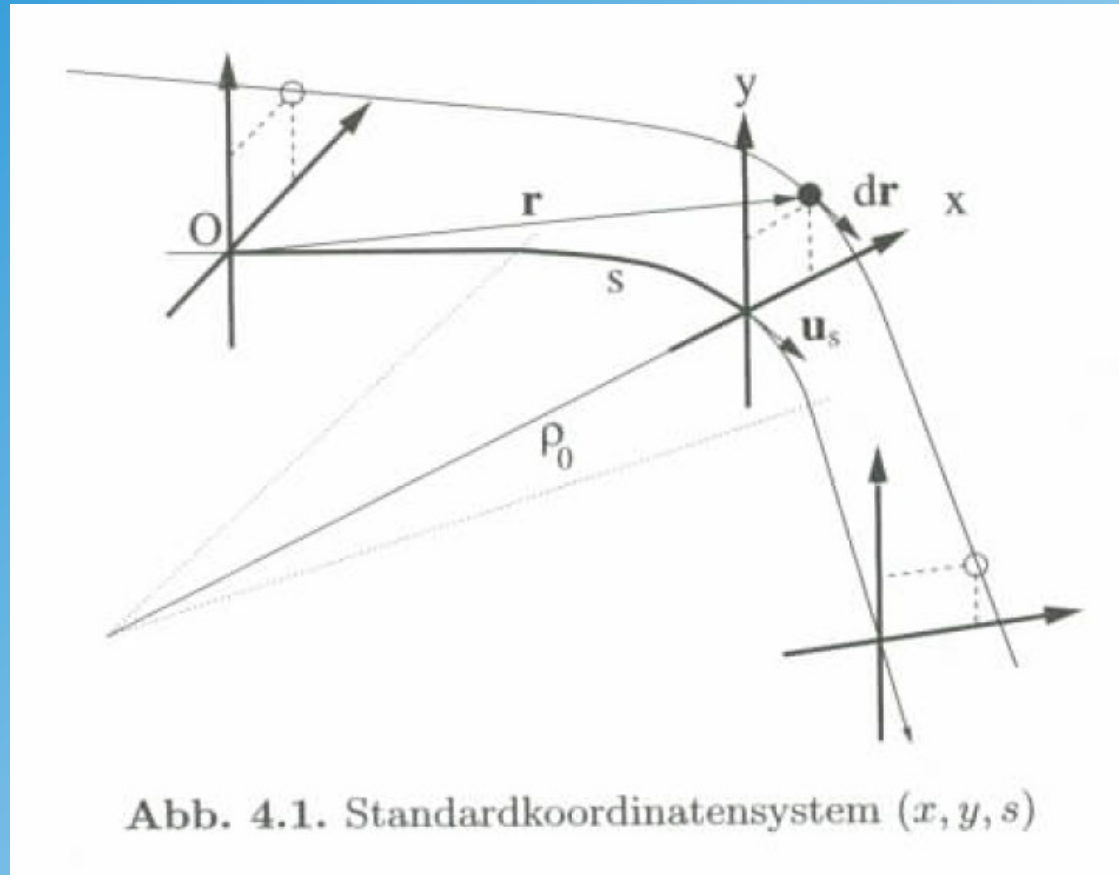
Superconducting Magnet

HERA Magnet $B=5T$



14 m Niob titanium wires ($<4K$) embedded in copper matrix

Standard Coordinate System



MPI-K Excursion: 12. November 16h00



