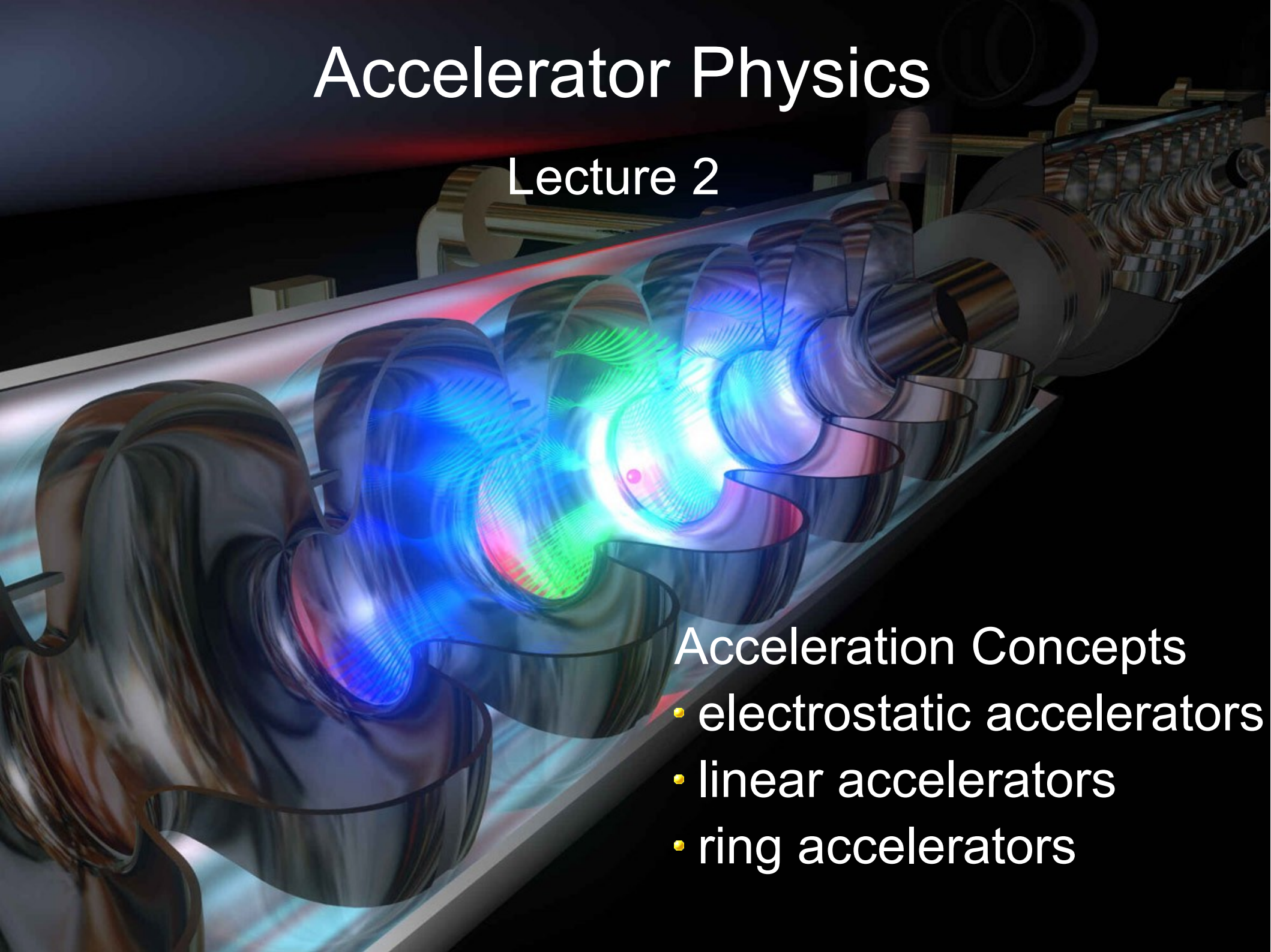


Accelerator Physics

Lecture 2

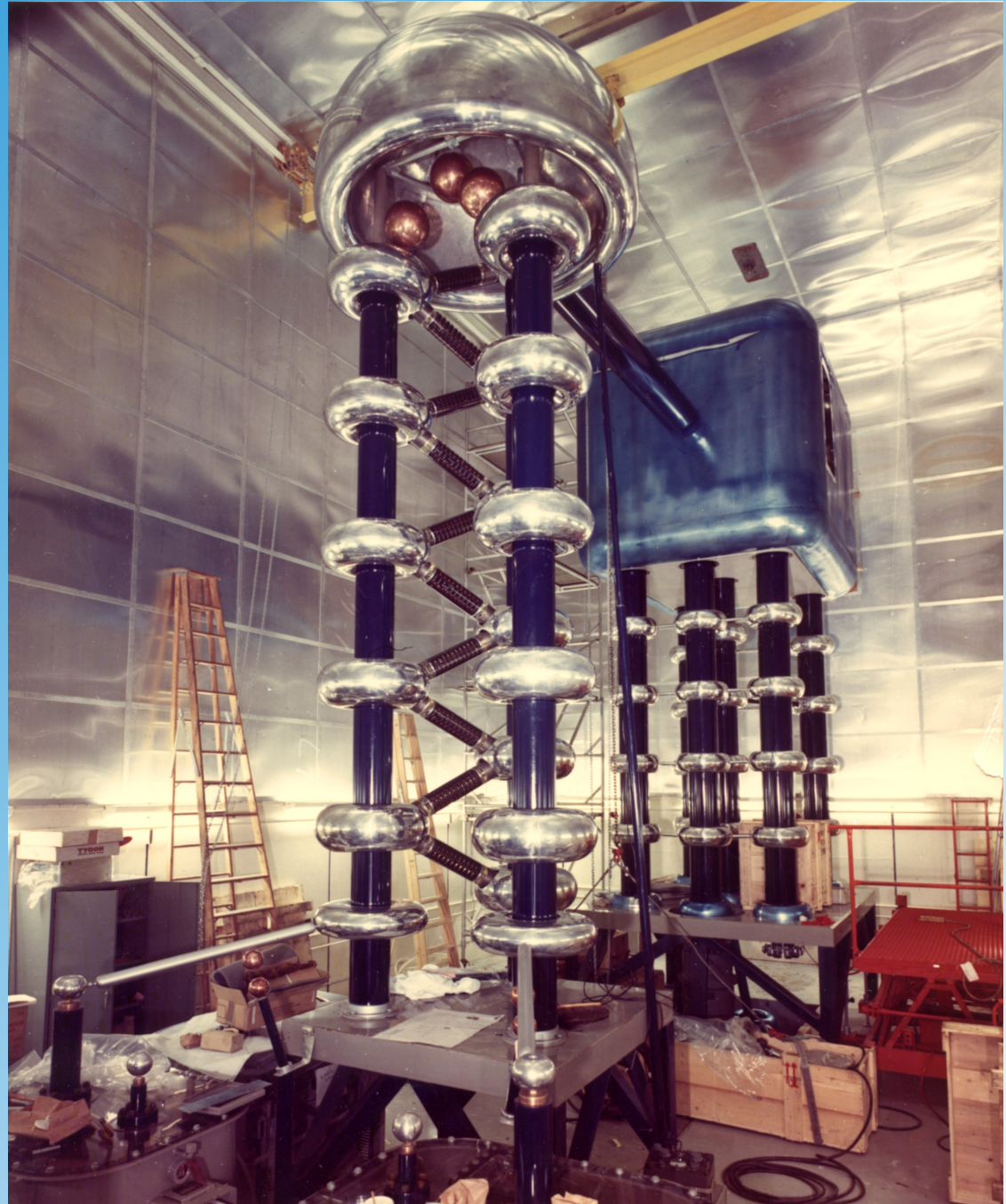


Acceleration Concepts

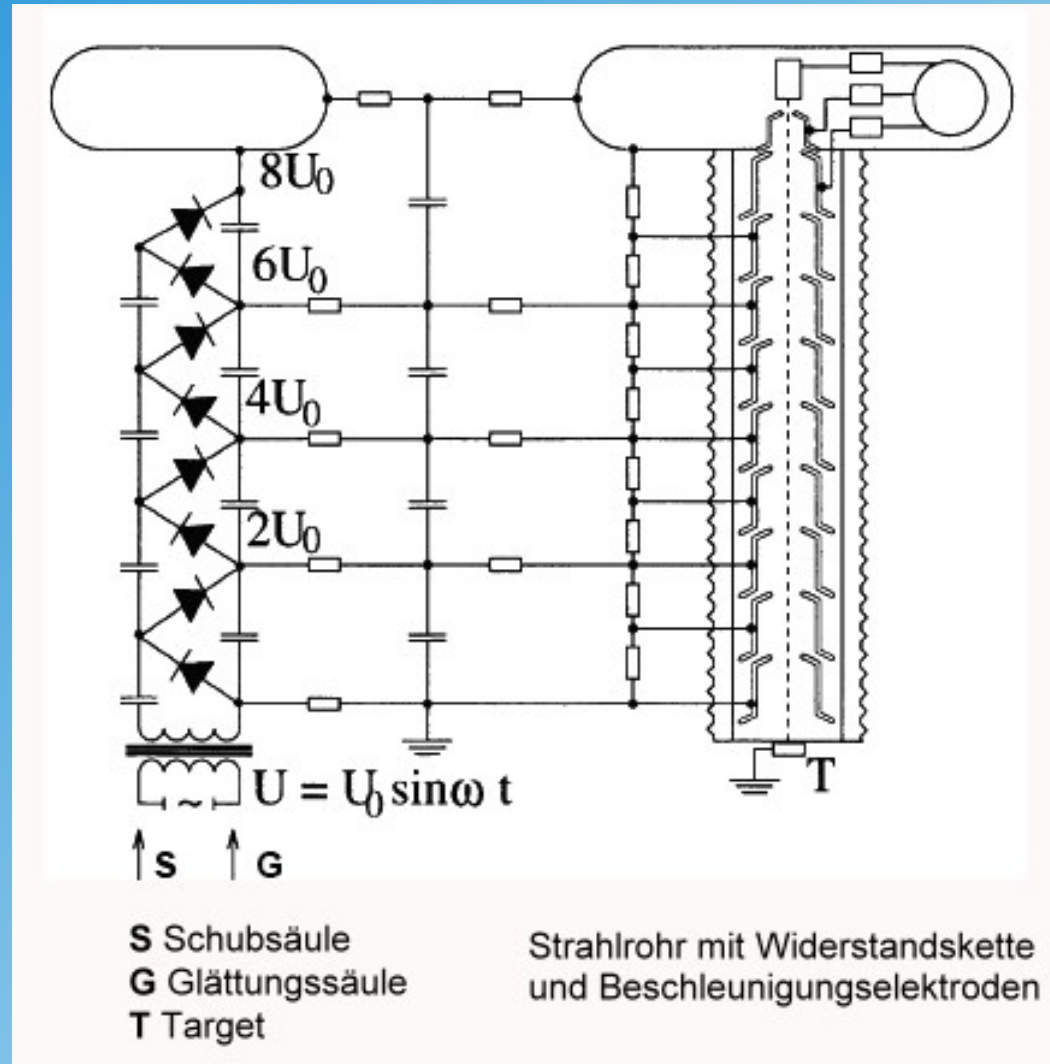
- electrostatic accelerators
- linear accelerators
- ring accelerators

Cockcroft-Walton Generator

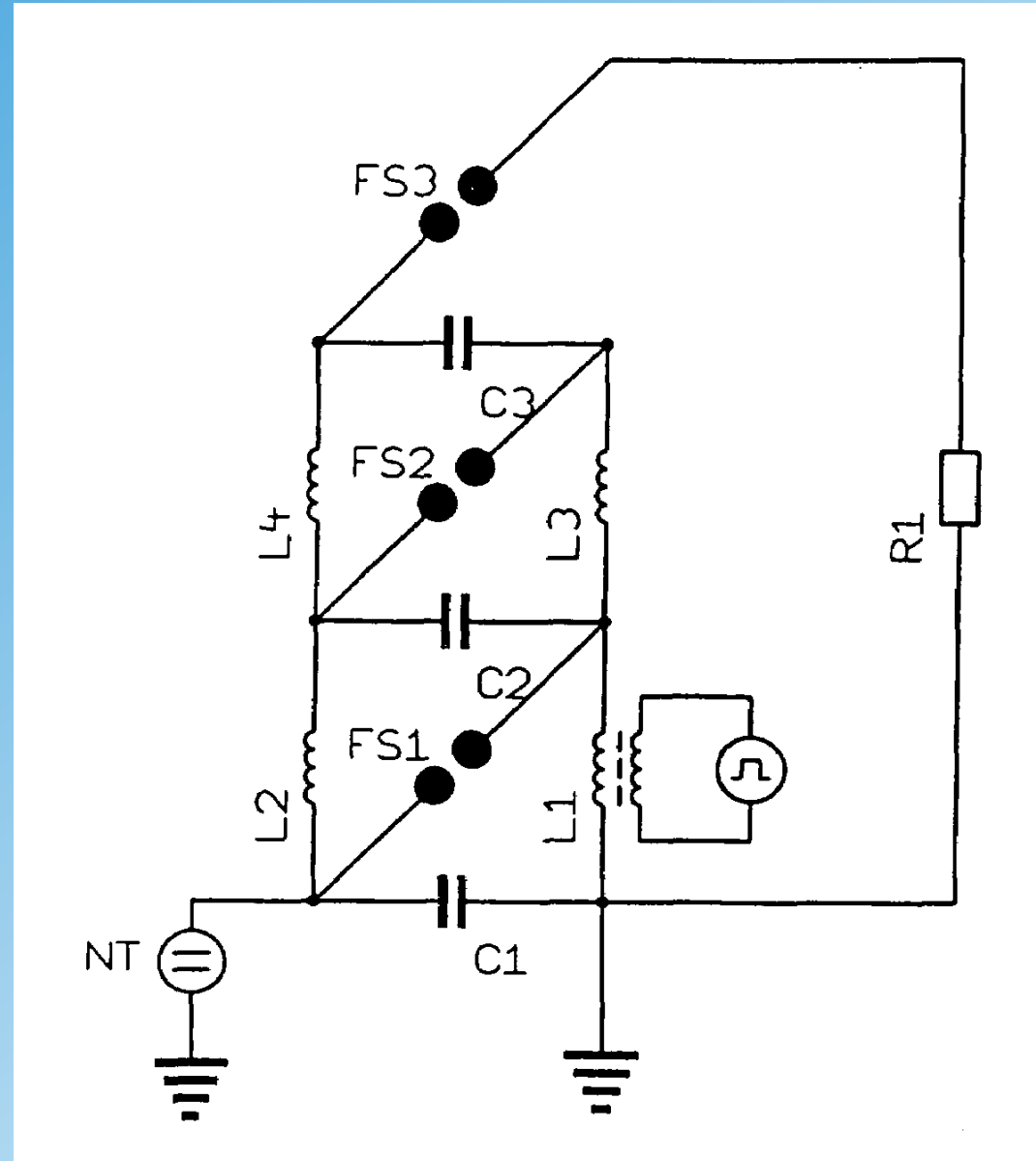
(electrostatic accelerator)



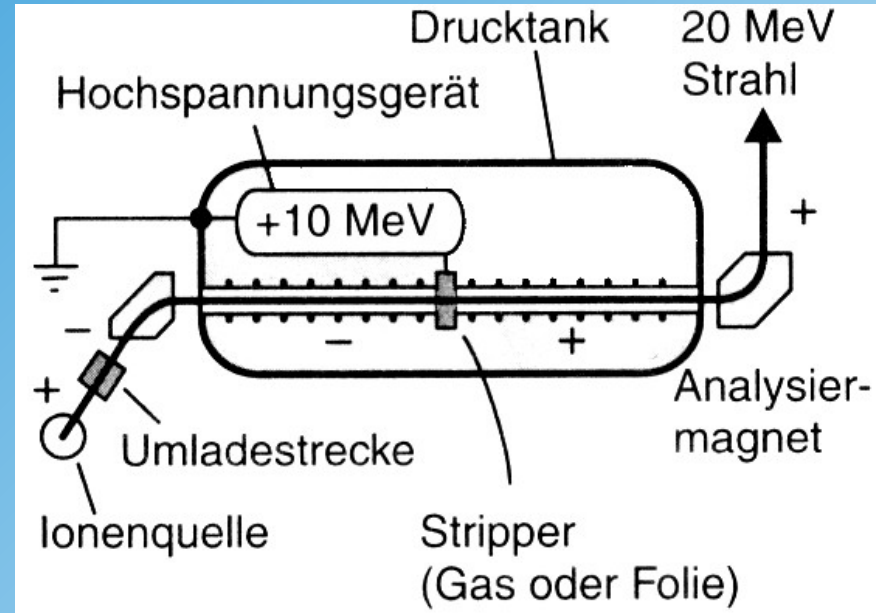
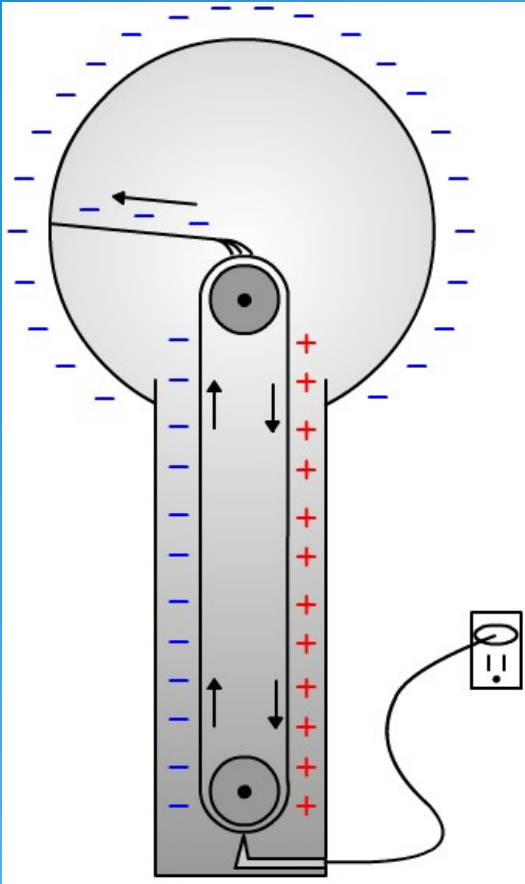
Schematics Cockcroft-Walton



Marx Generator

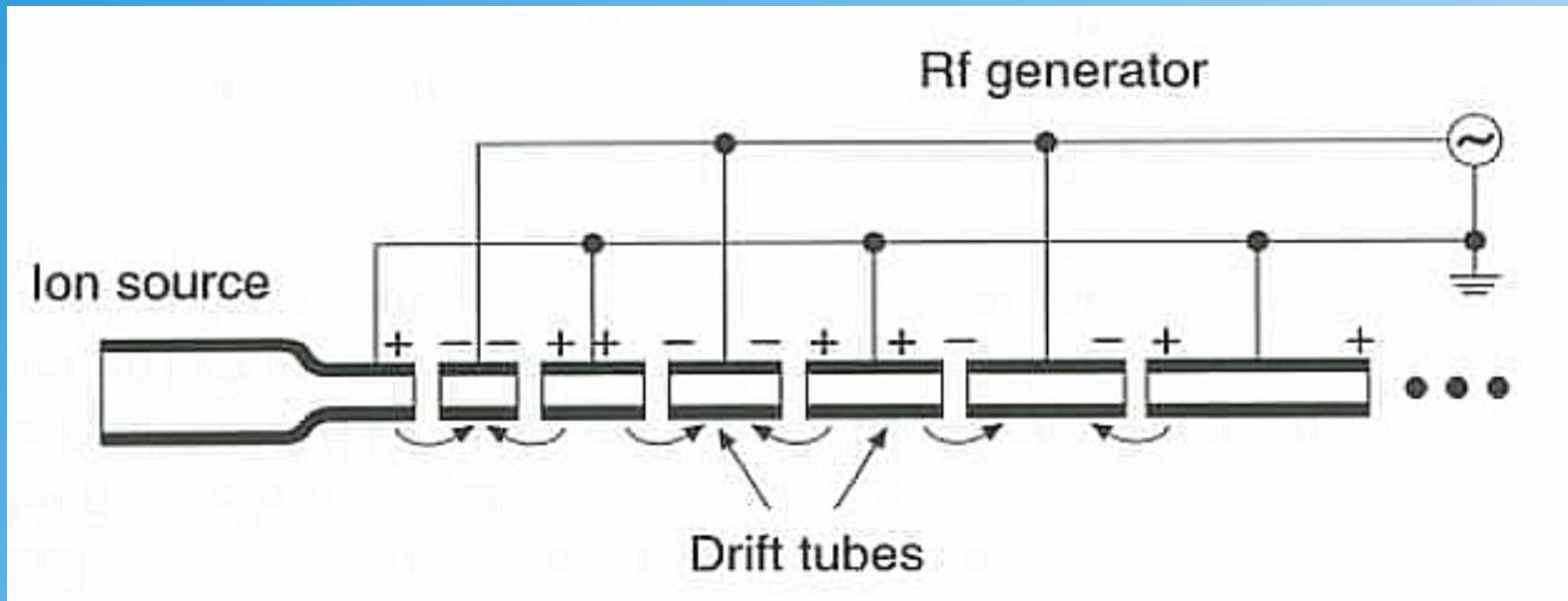


Van de Graaff Belt Generator

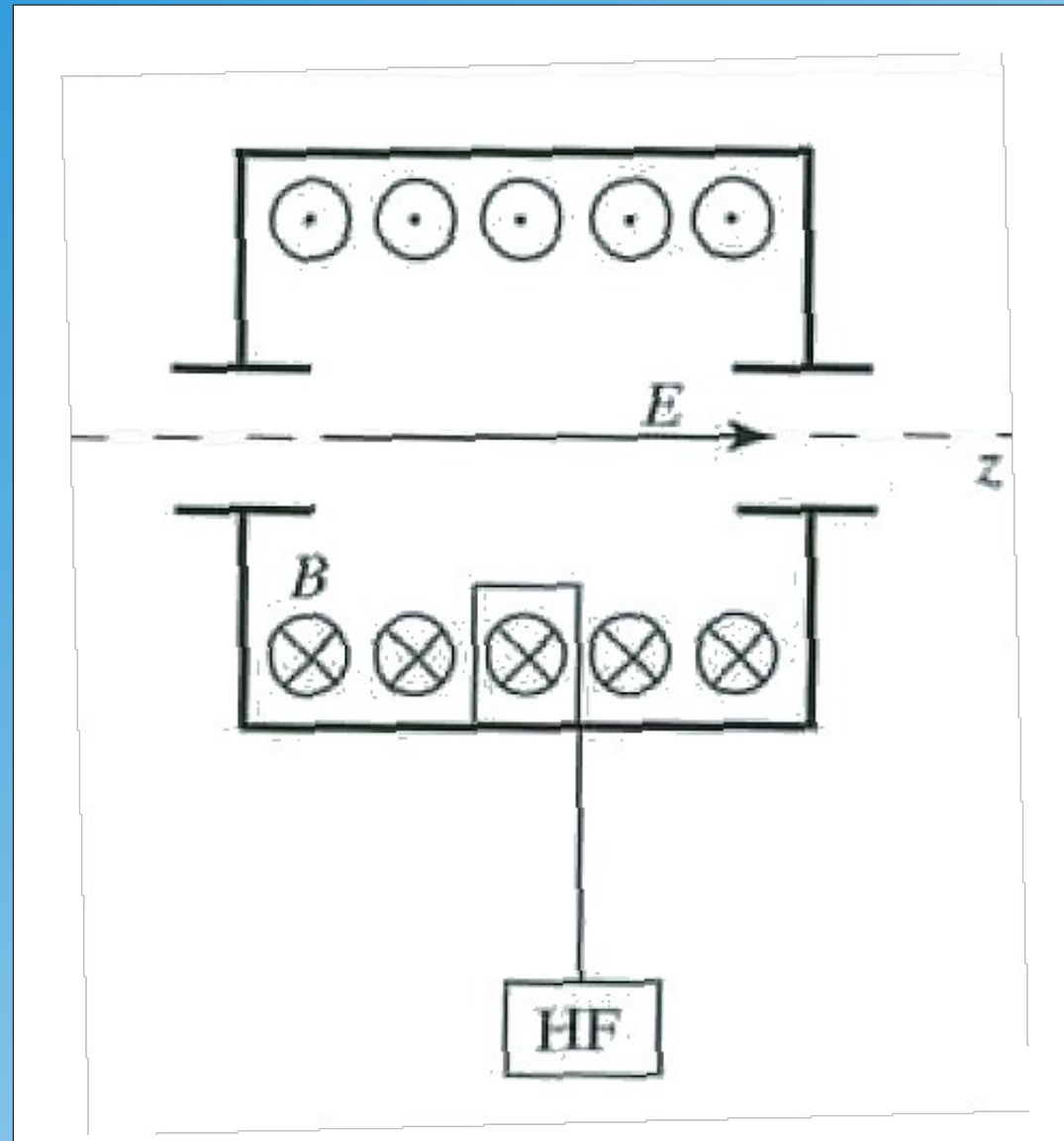


Acceleration of Particles

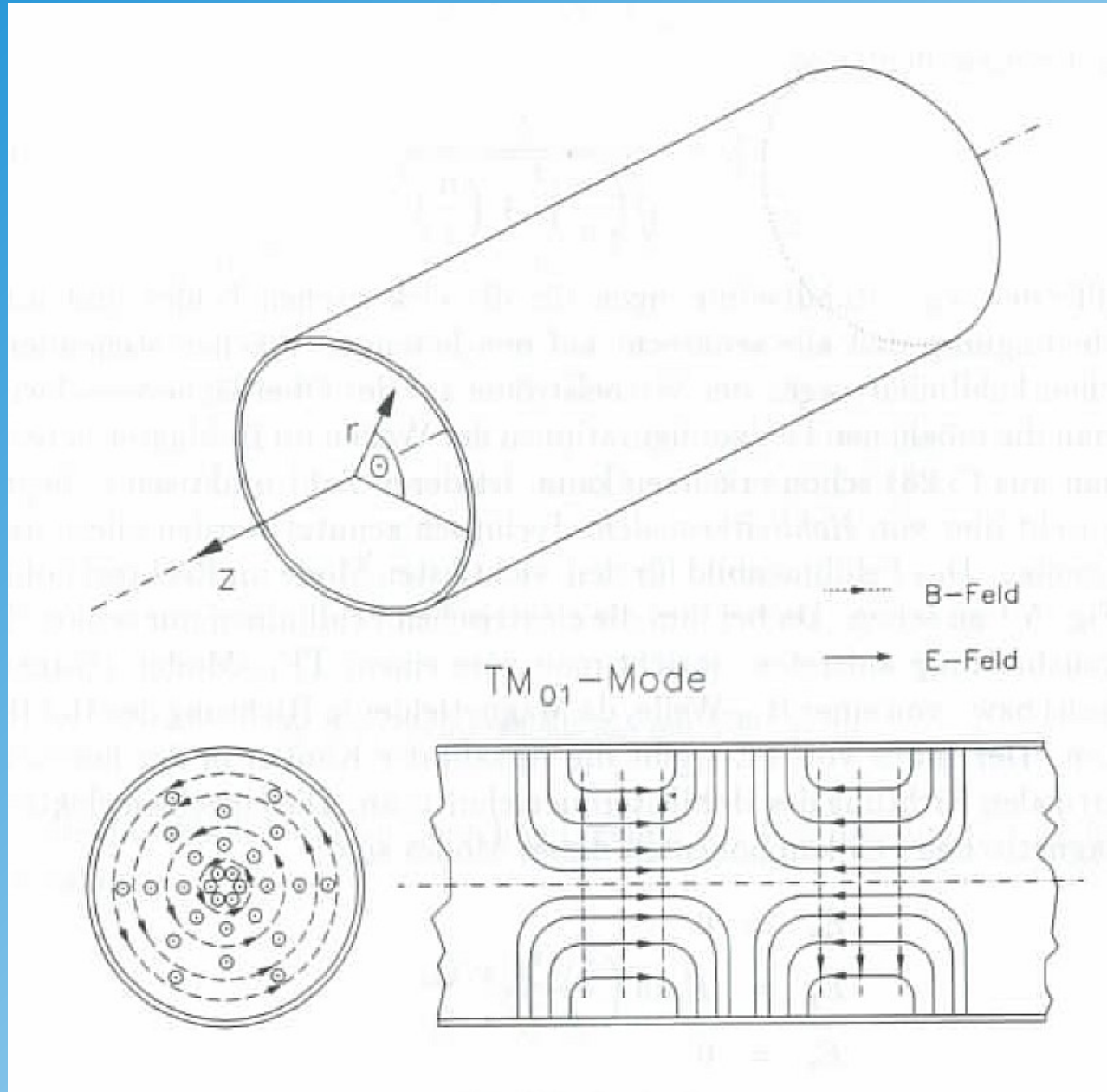
drift tubes (Wideröe structure):



Single Cell

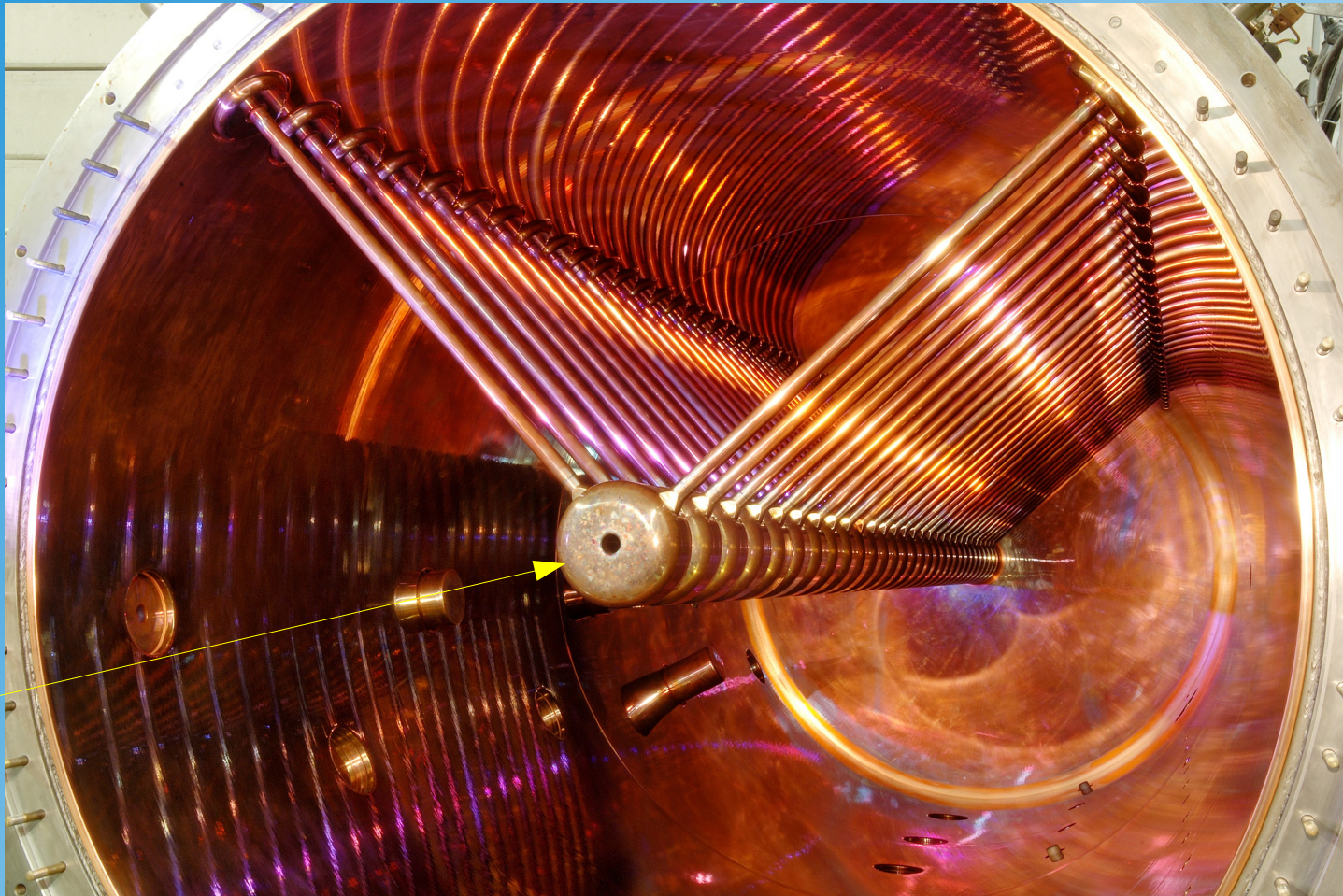


TM₀₁ Mode



Unilac (Darmstadt)

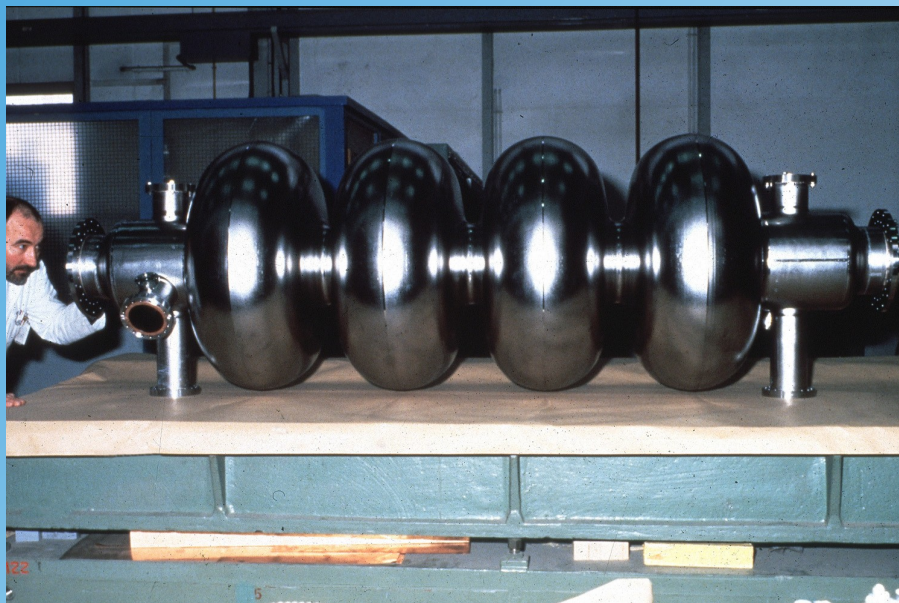
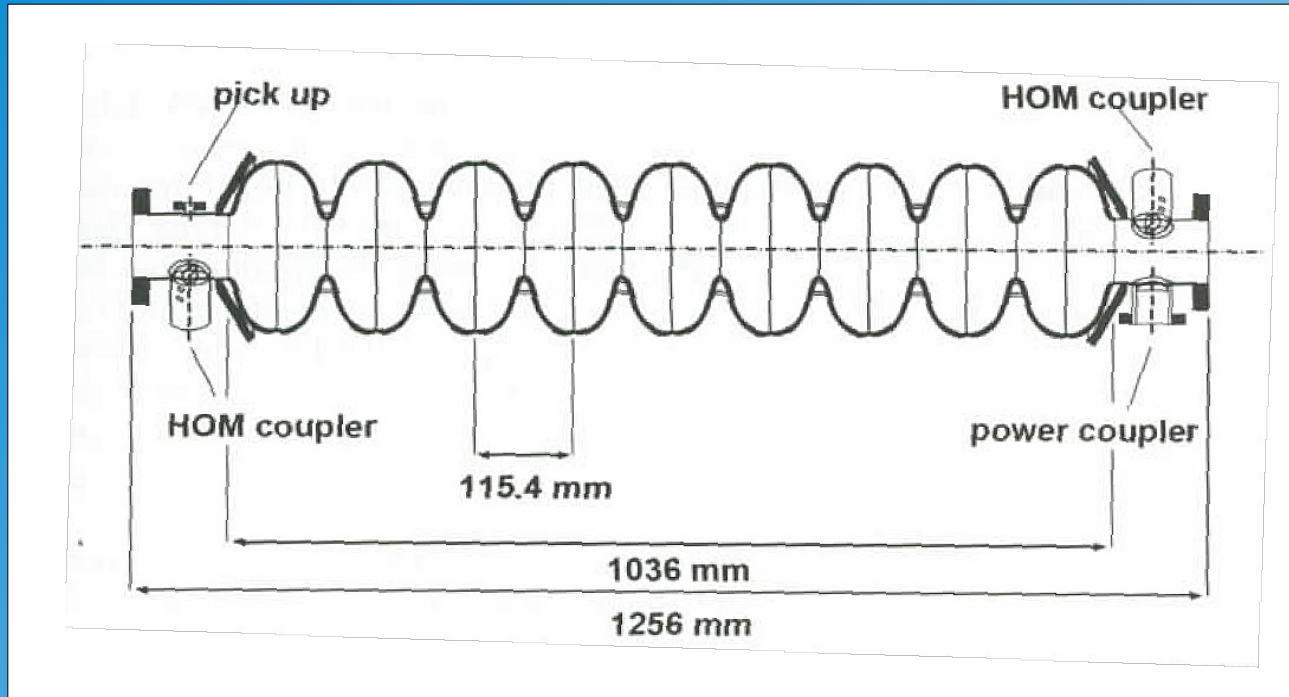
(linear accelerator)



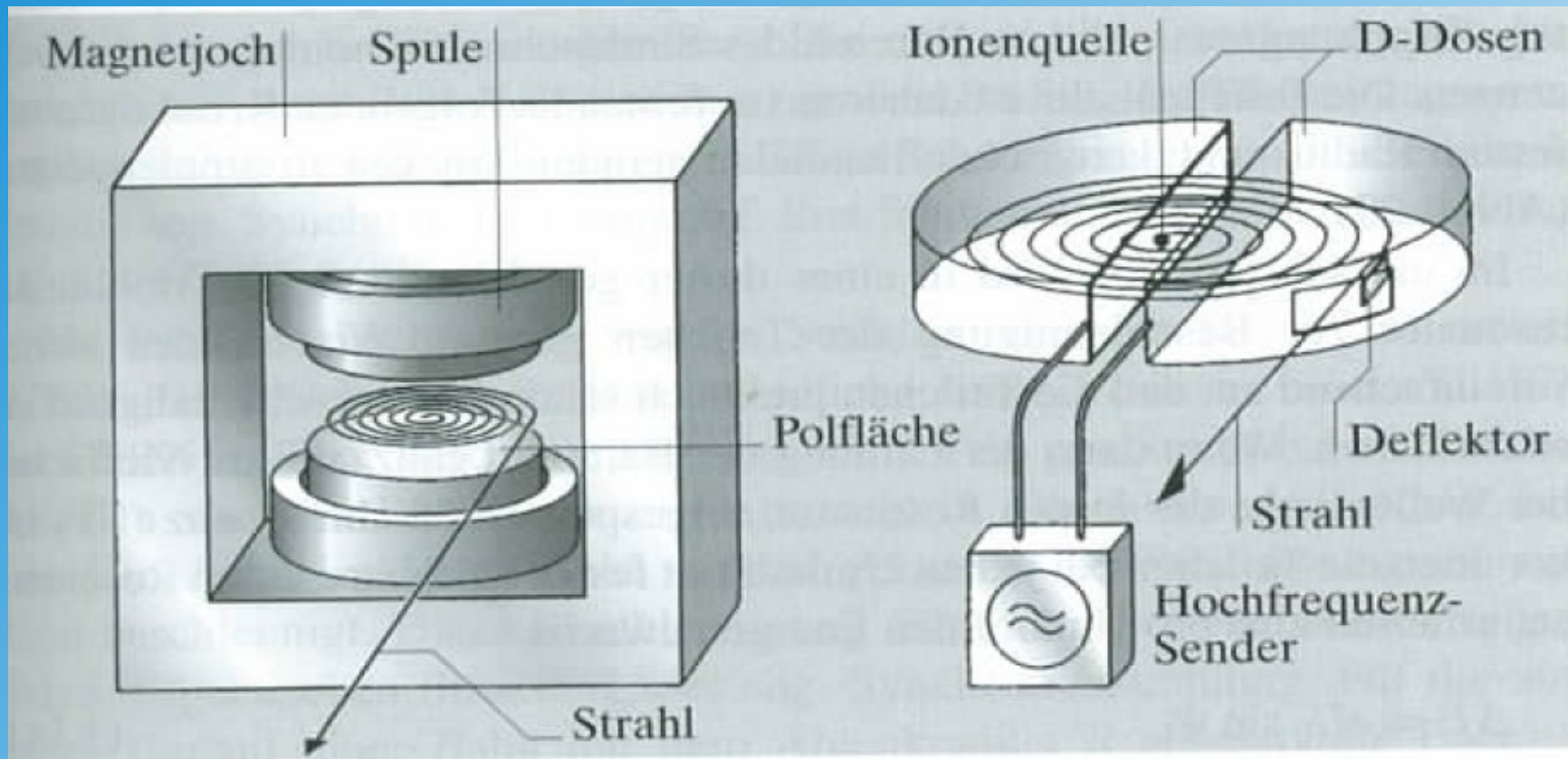
resonator
cell

Alvarez- Structure

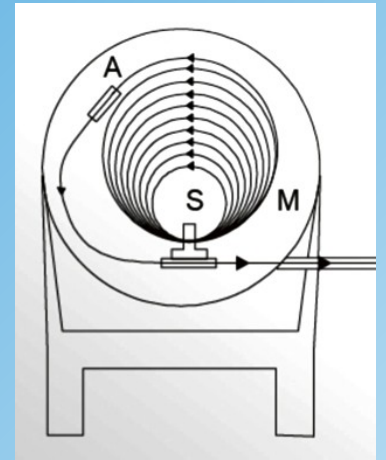
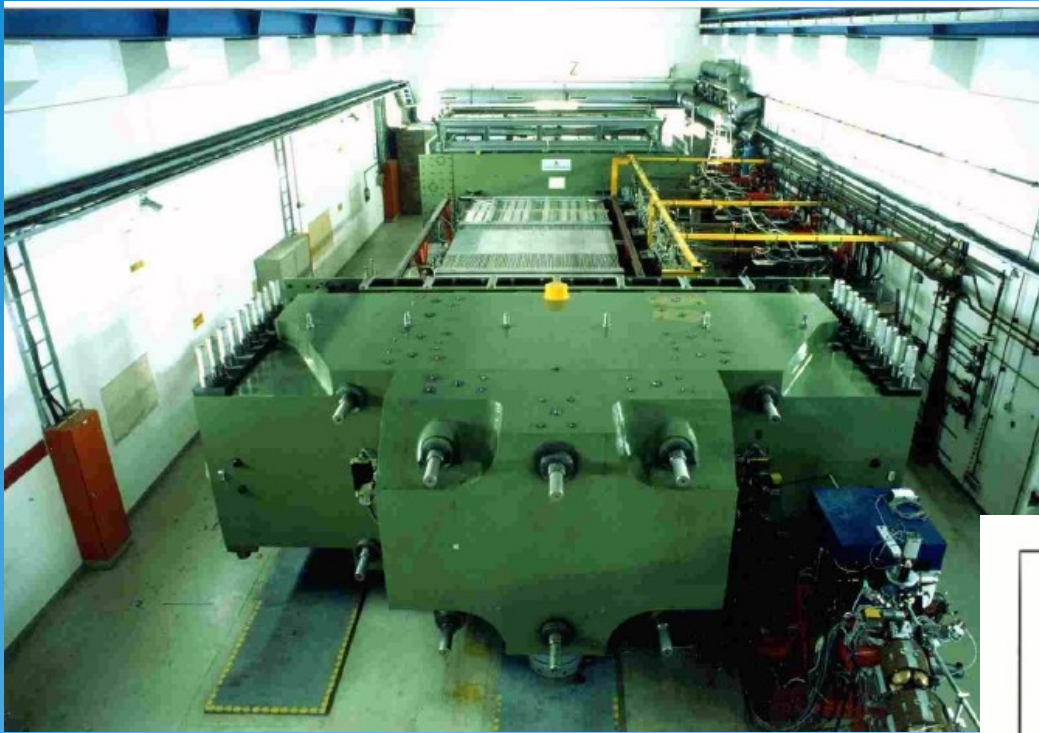
Multicell Cavity



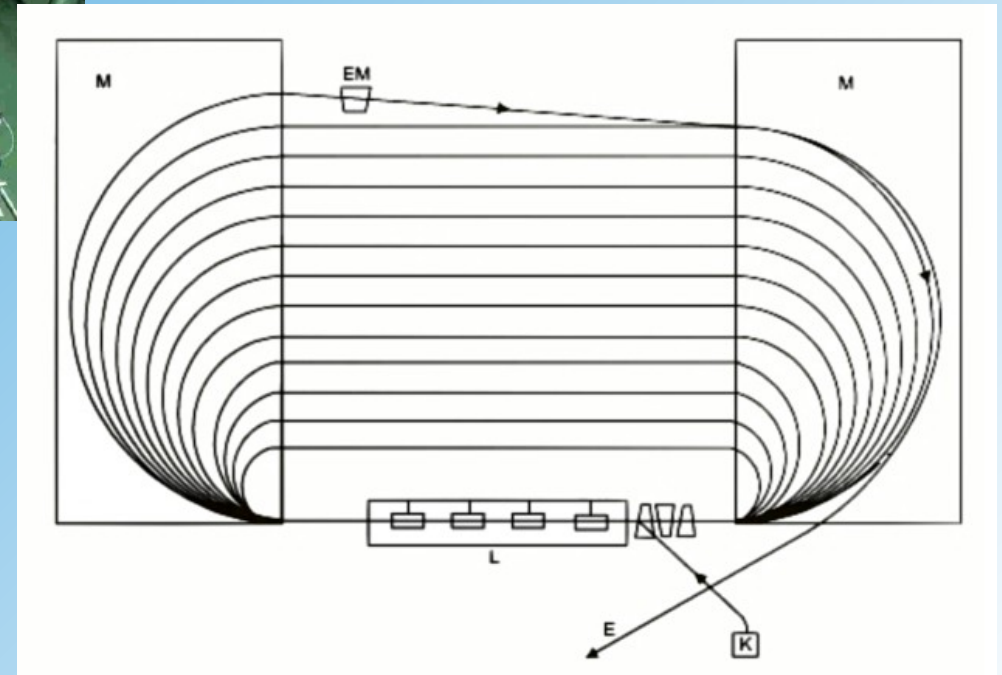
Cyclotron



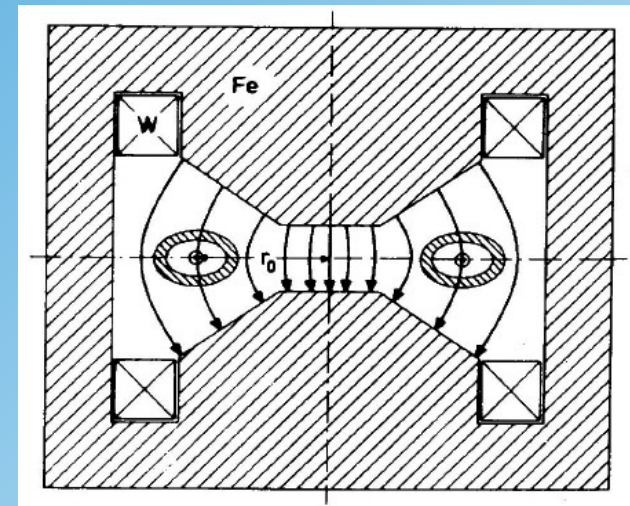
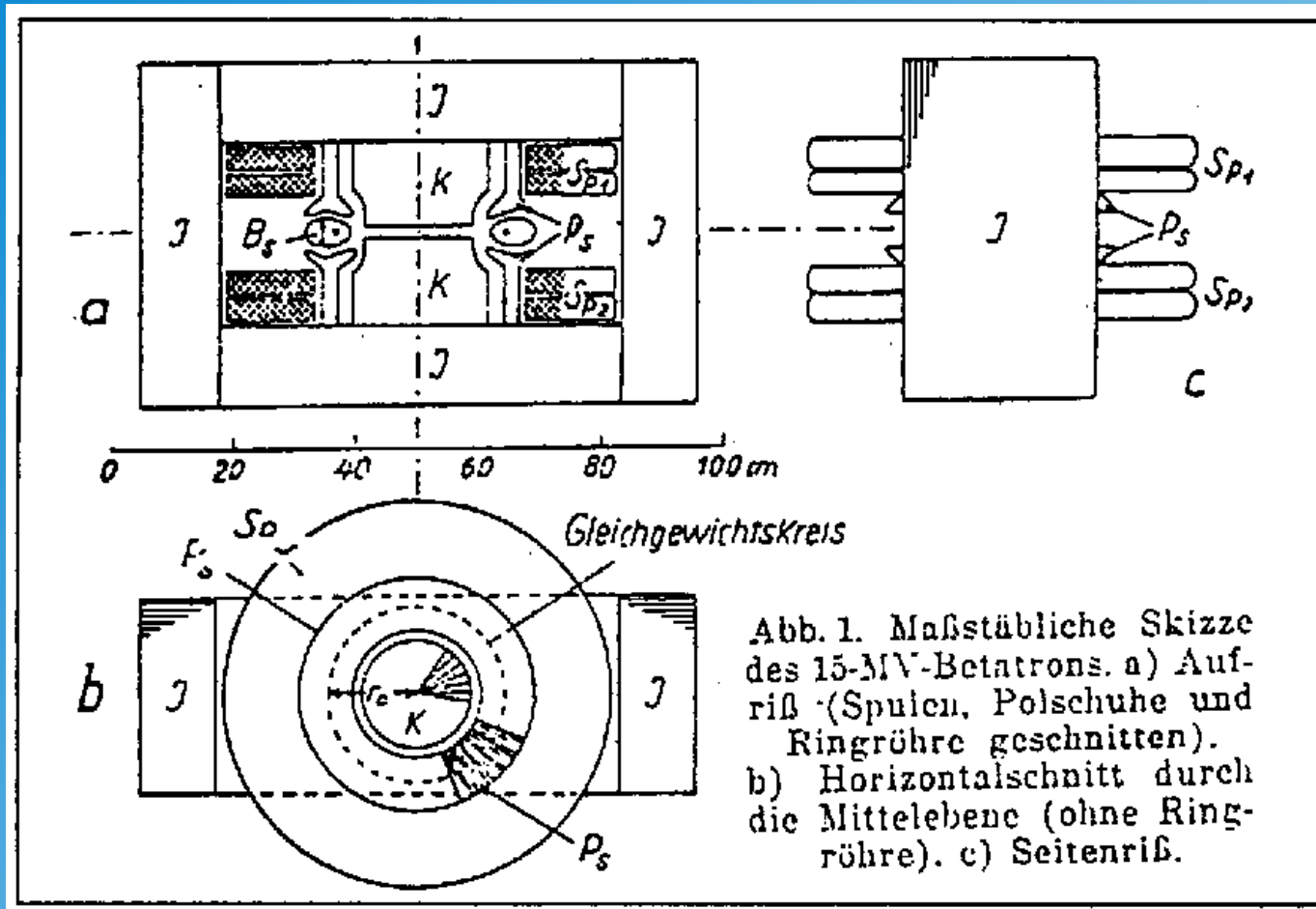
Microtron



Mainzer Microtron
("Rennbahn")



Betatron



Wideröe 1944

1955

