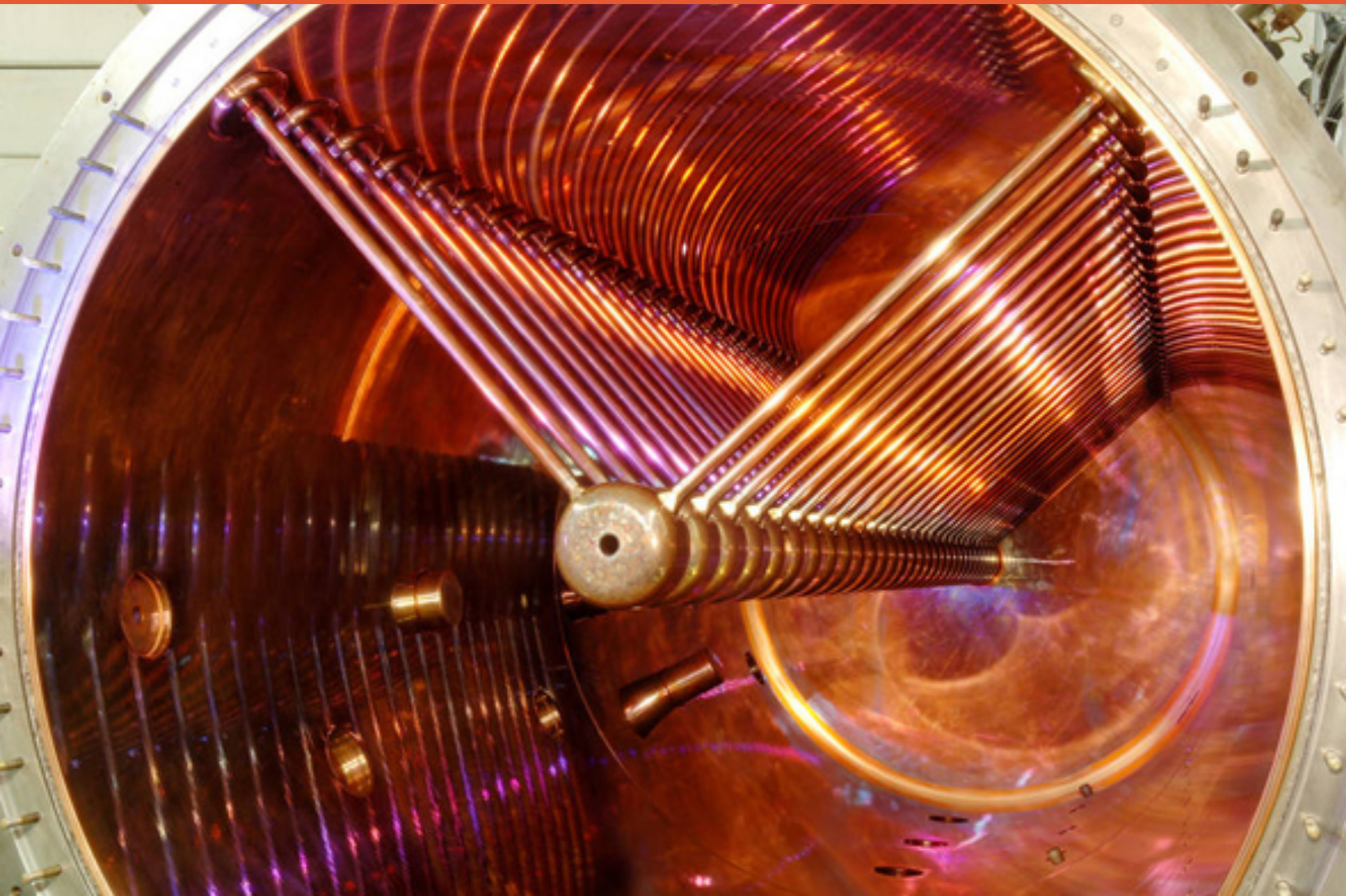
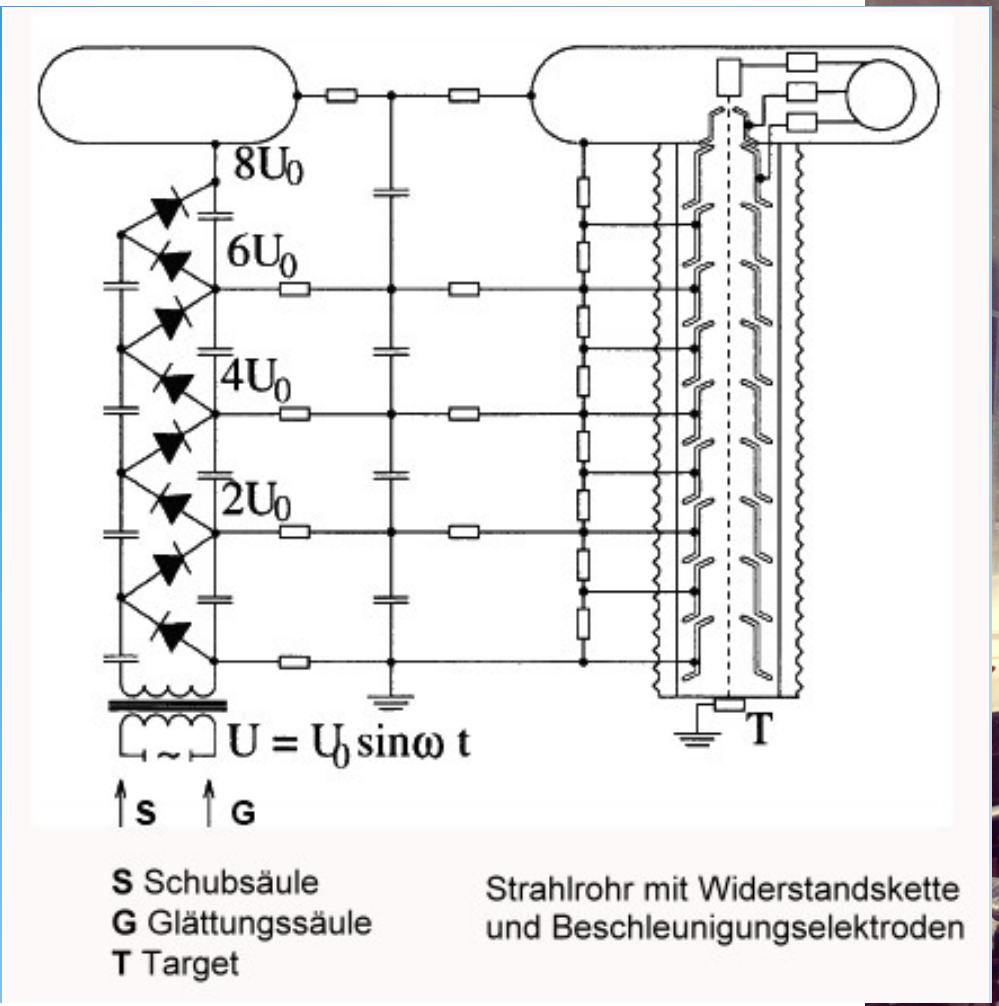
2. ACCELERATOR TYPES

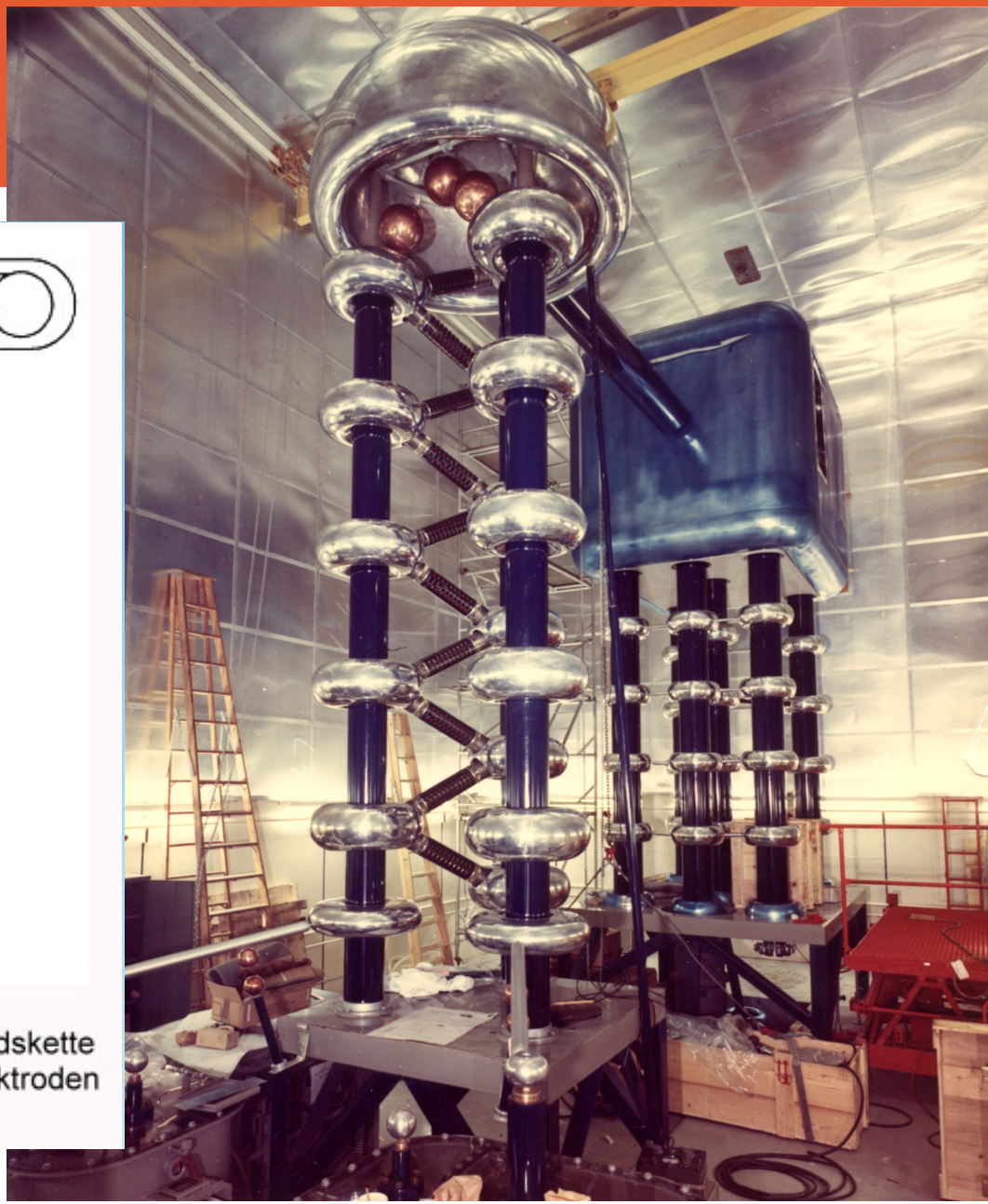


Cockroft-Walton Generator

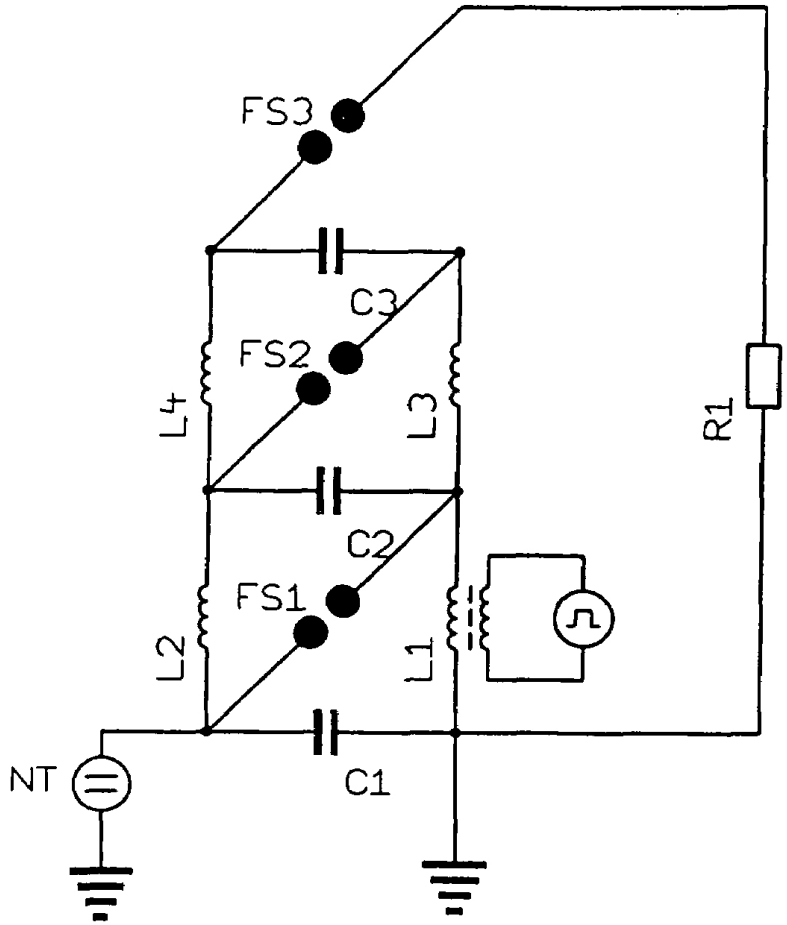


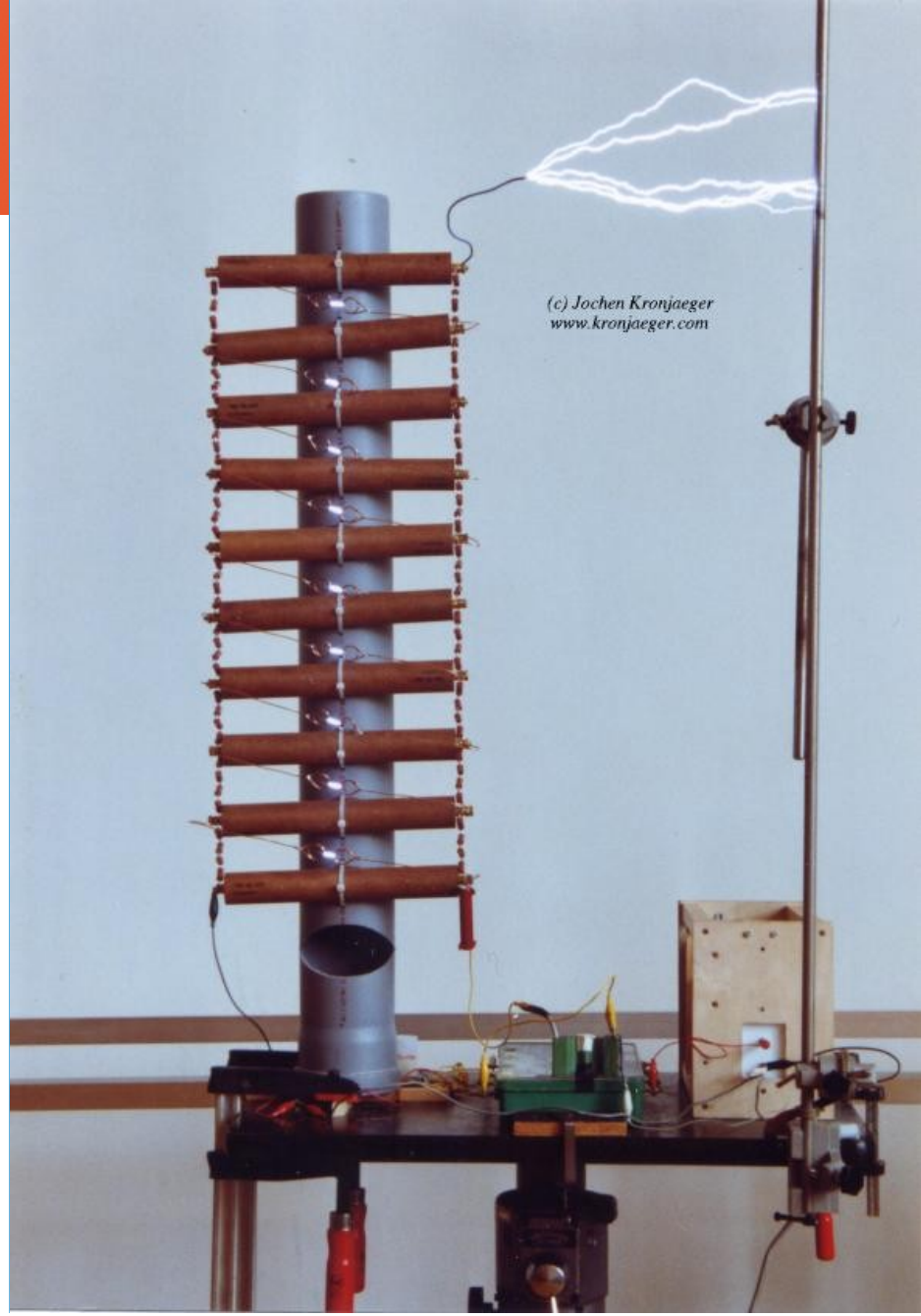
S Schubsäule
G Glättungssäule
T Target

Strahlrohr mit Widerstandskette und Beschleunigungselektroden

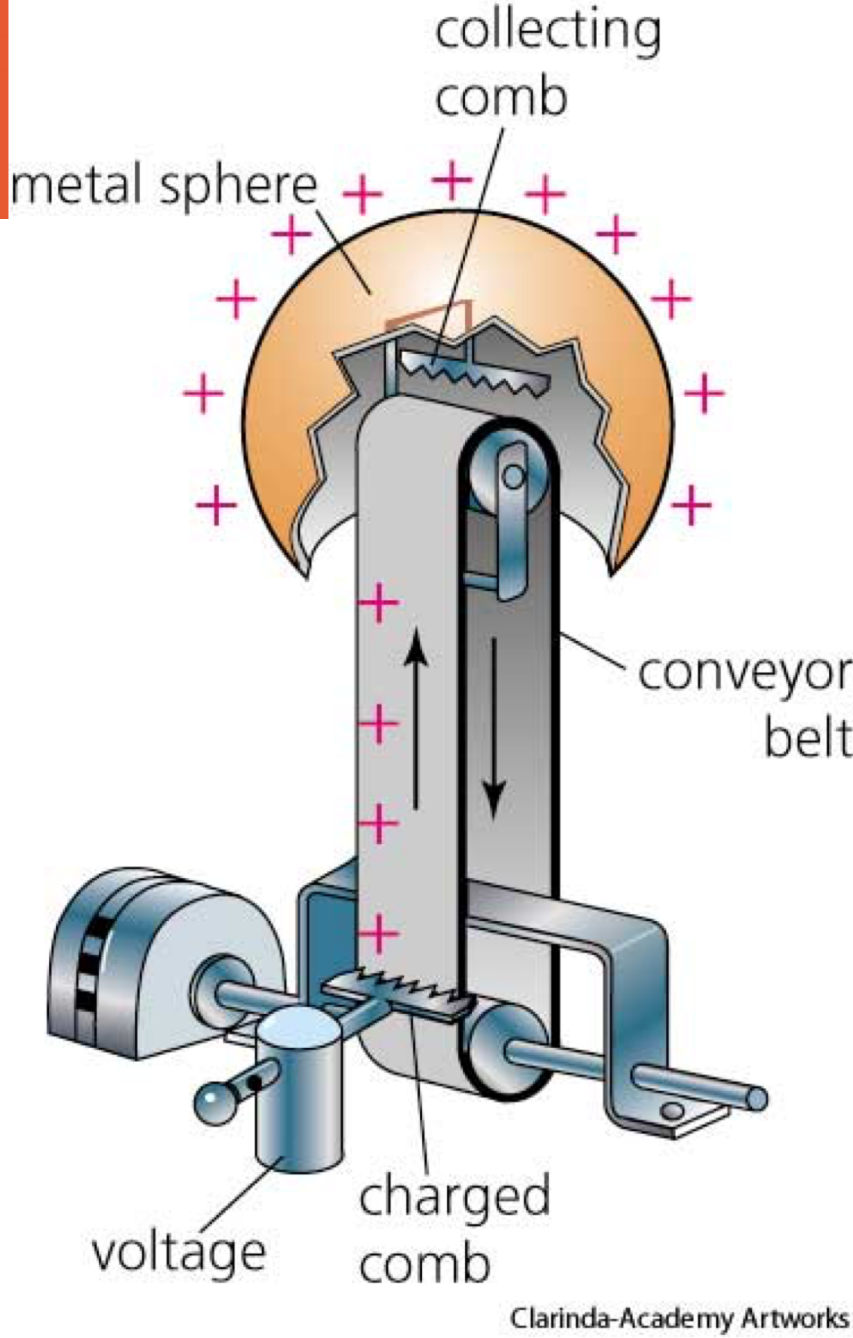


Marx Generator



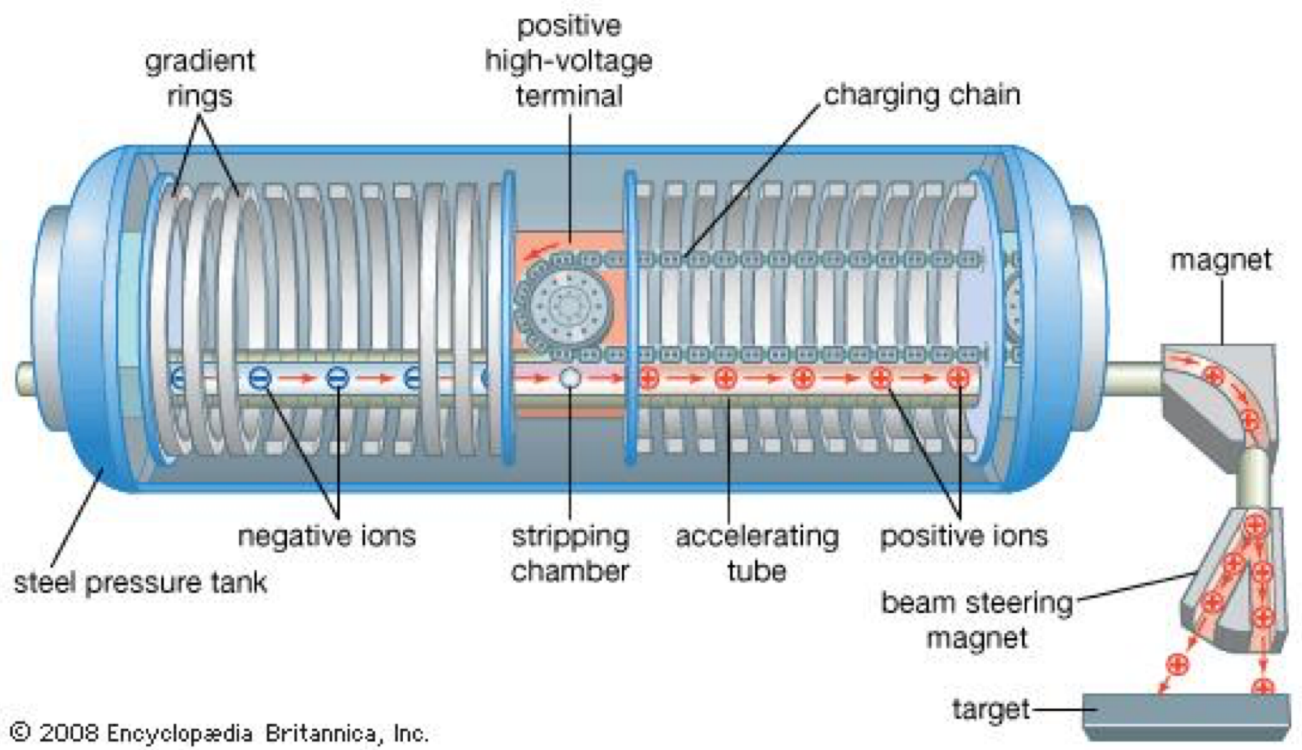


Van de Graaf Accelerator

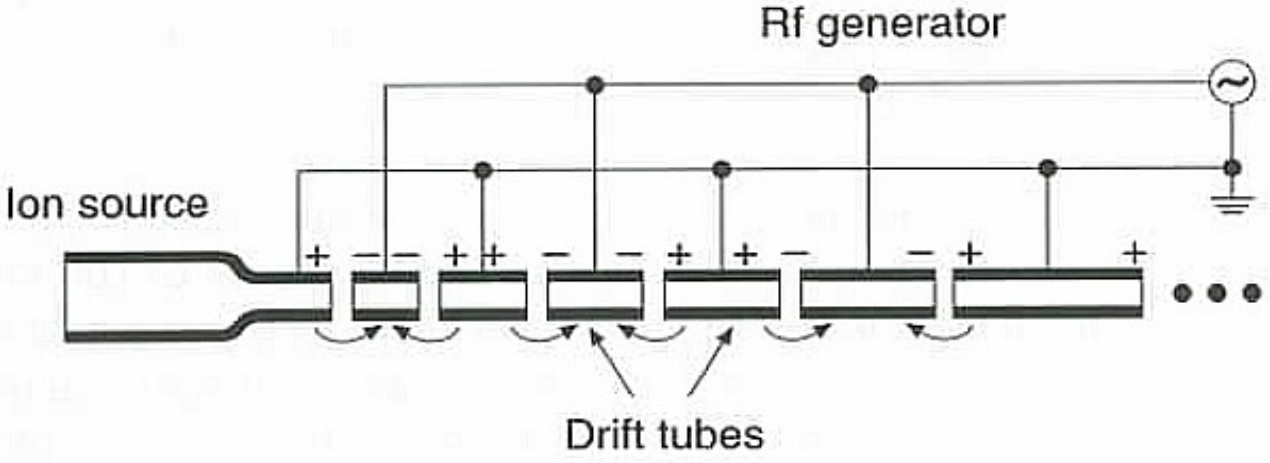


Tandem Van de Graaf Accelerator

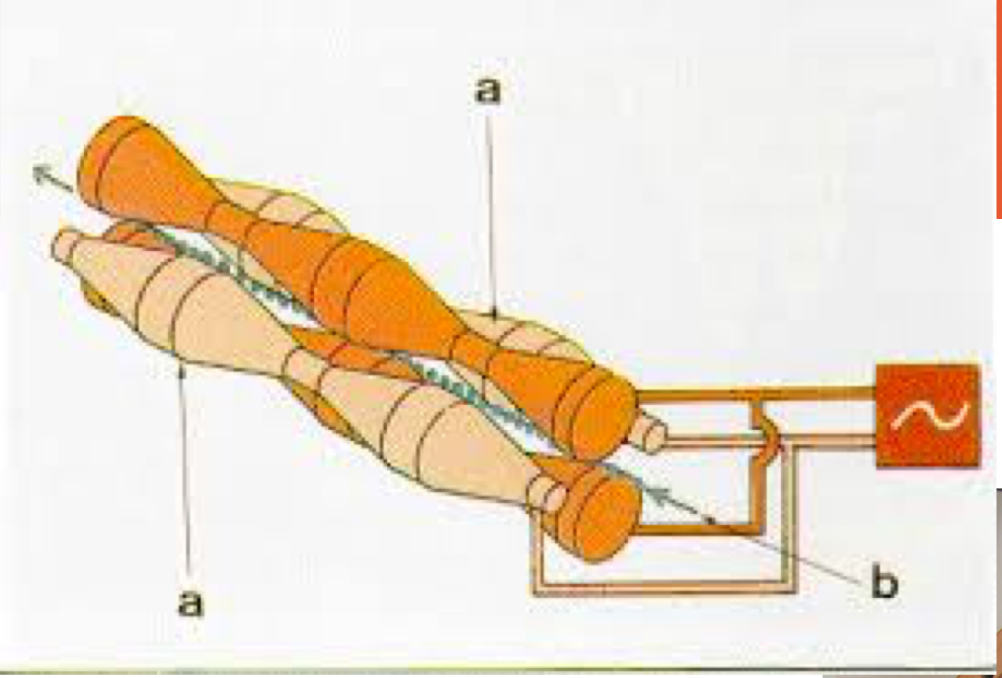
Tandem at Max-Planck Institute, Heidelberg

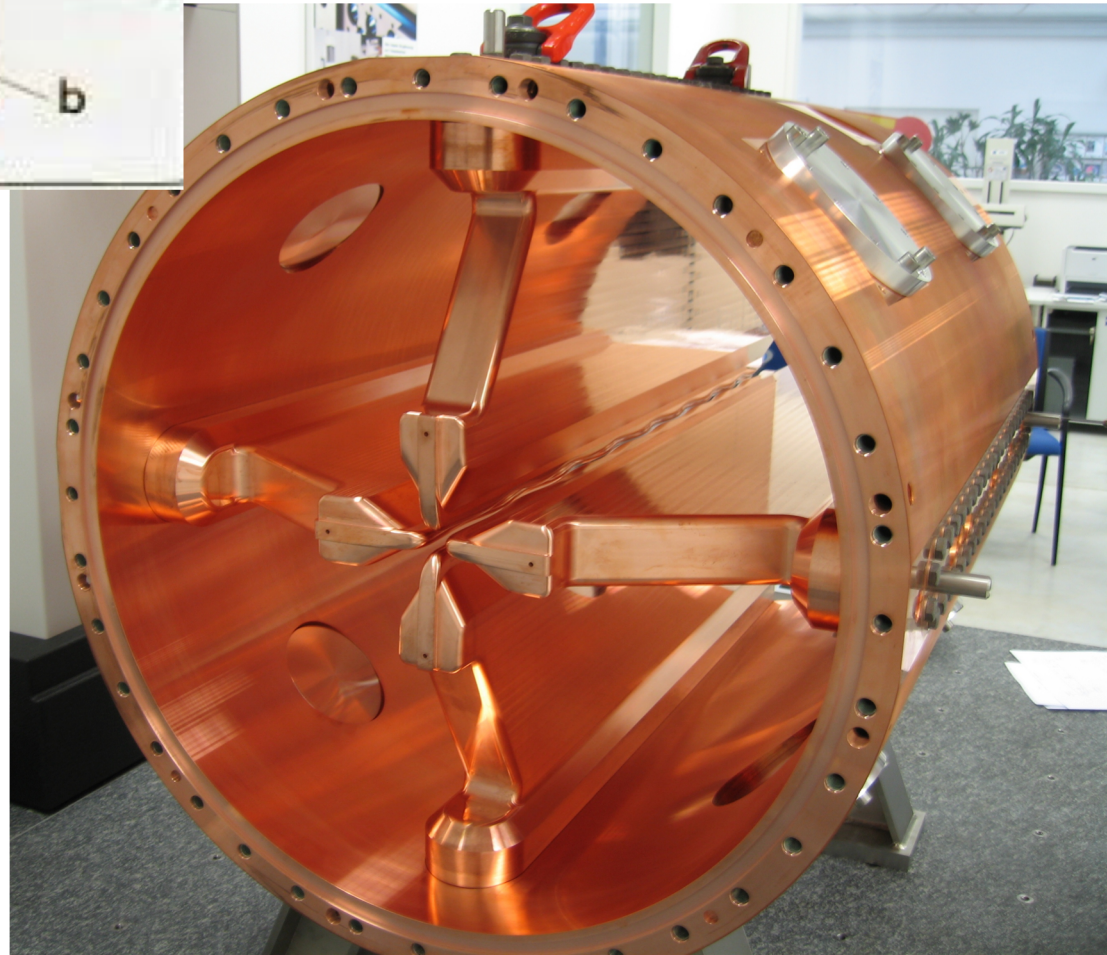


Drift tubes (Wideröe structure):

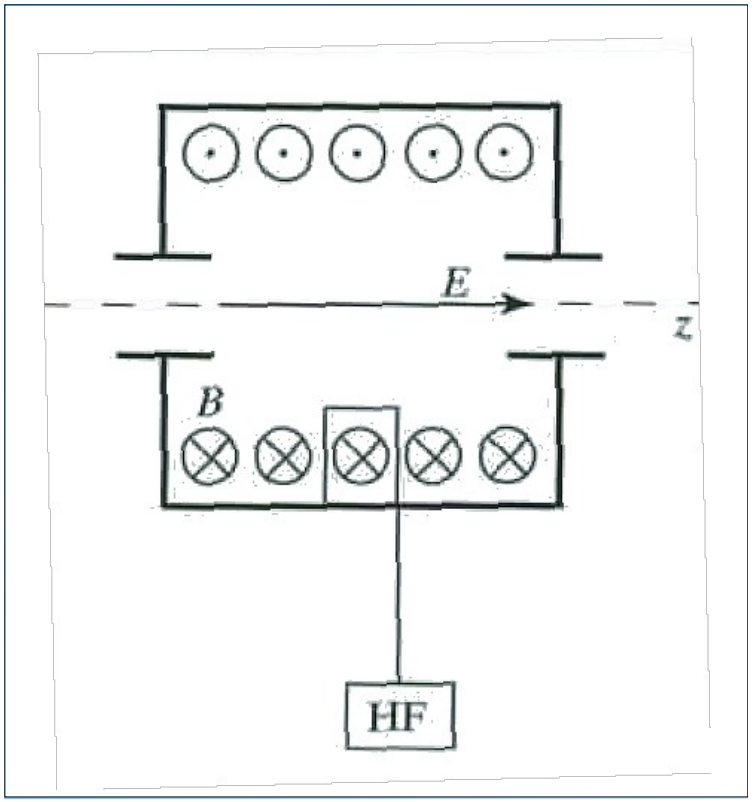


Radio-Frequency Quadrupole (RFQ)

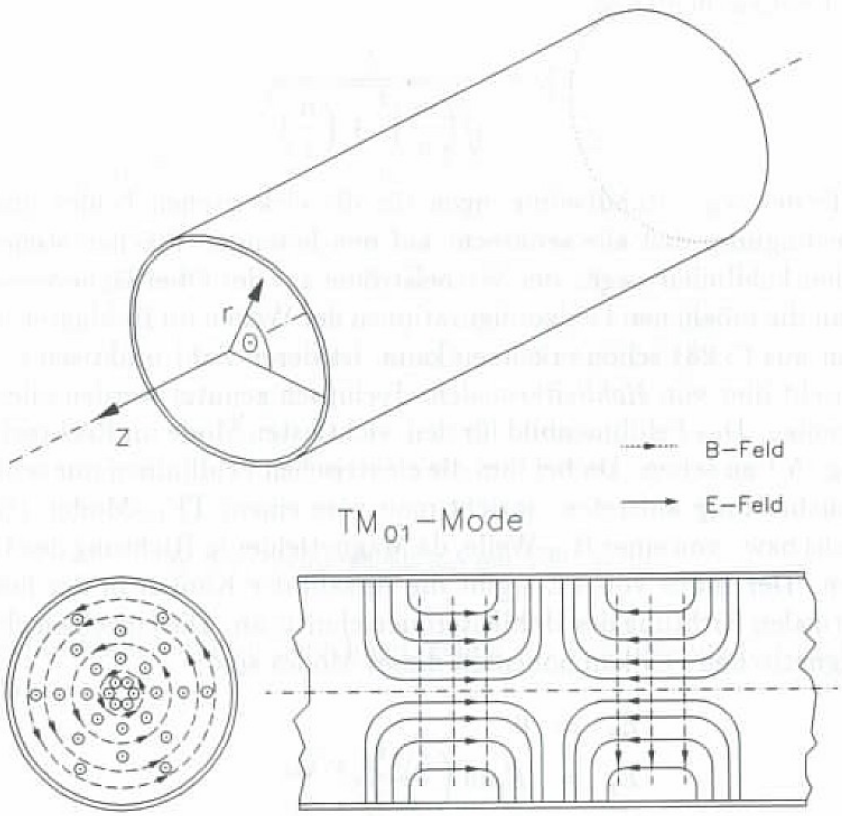




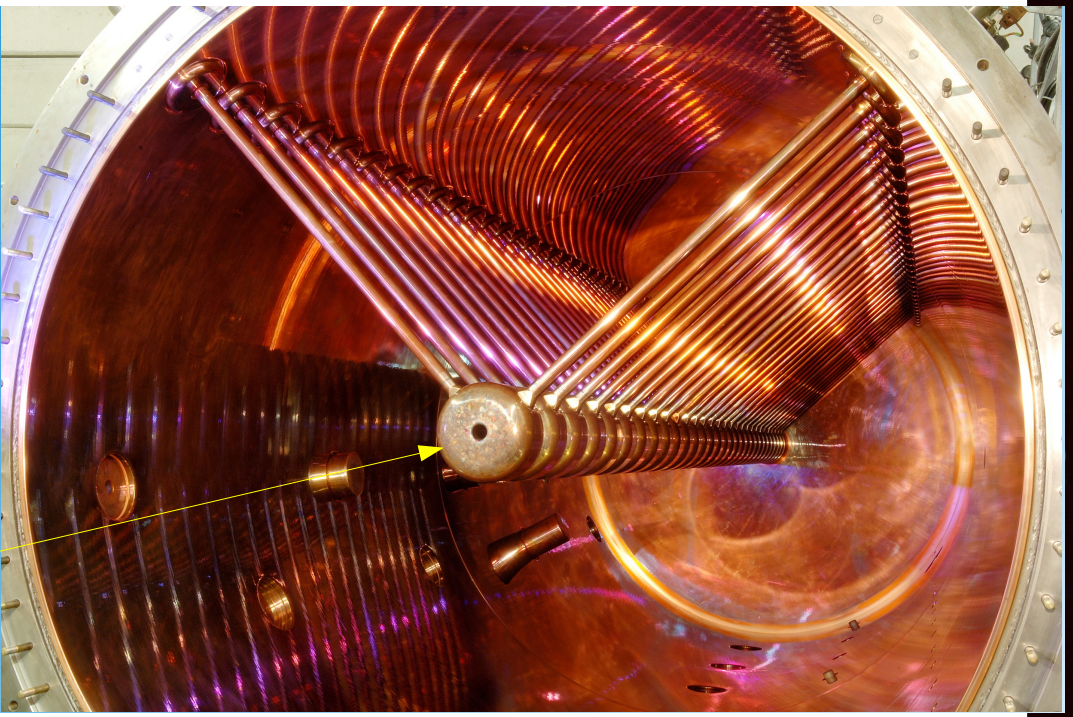
Single resonator

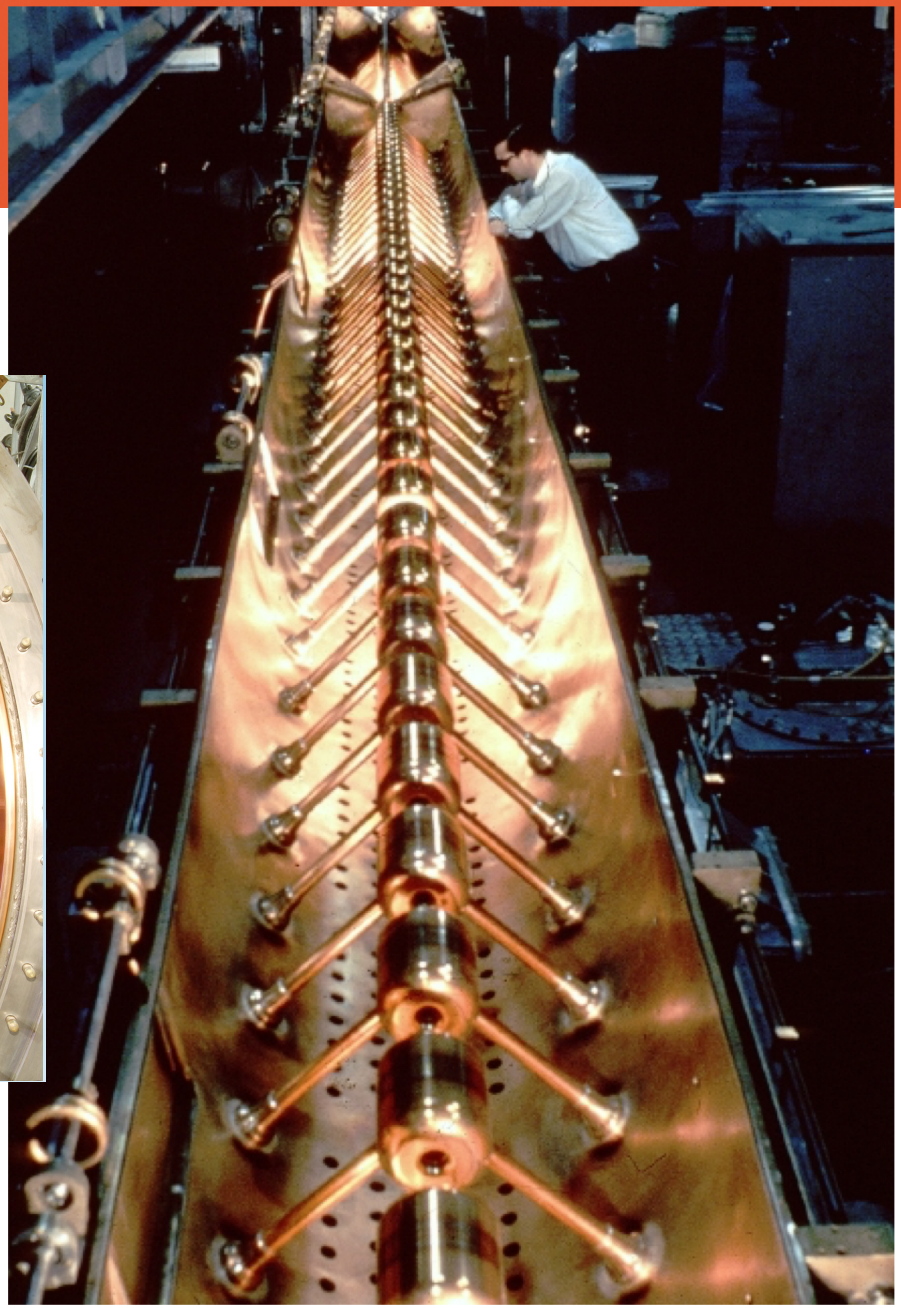


TM01 Mode

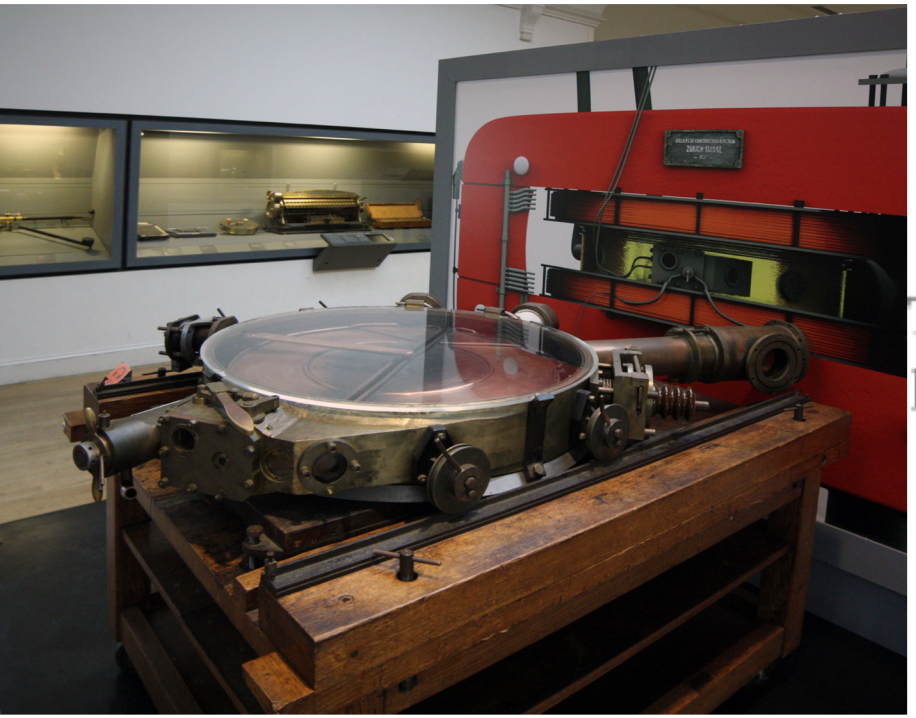


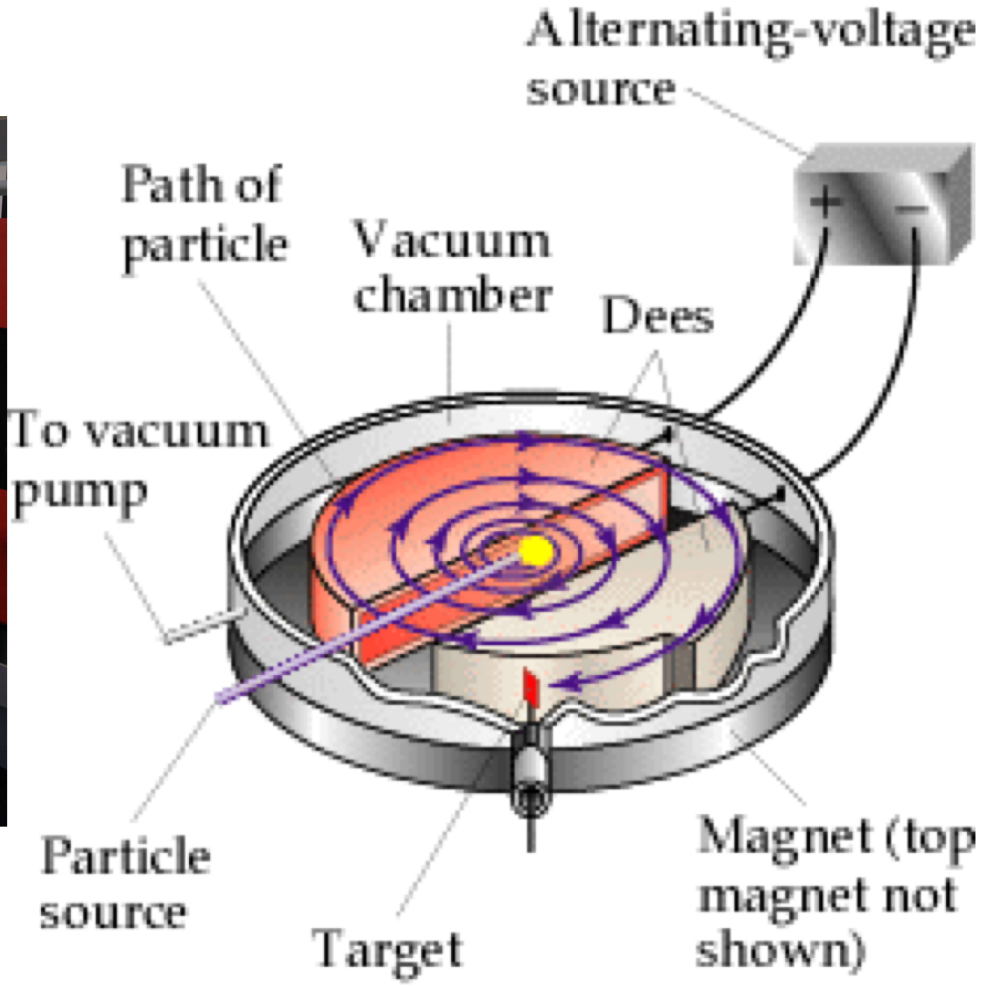
Alvarez Structure



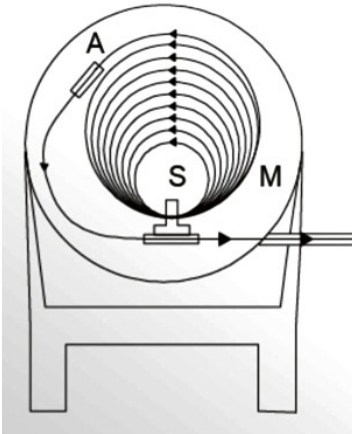


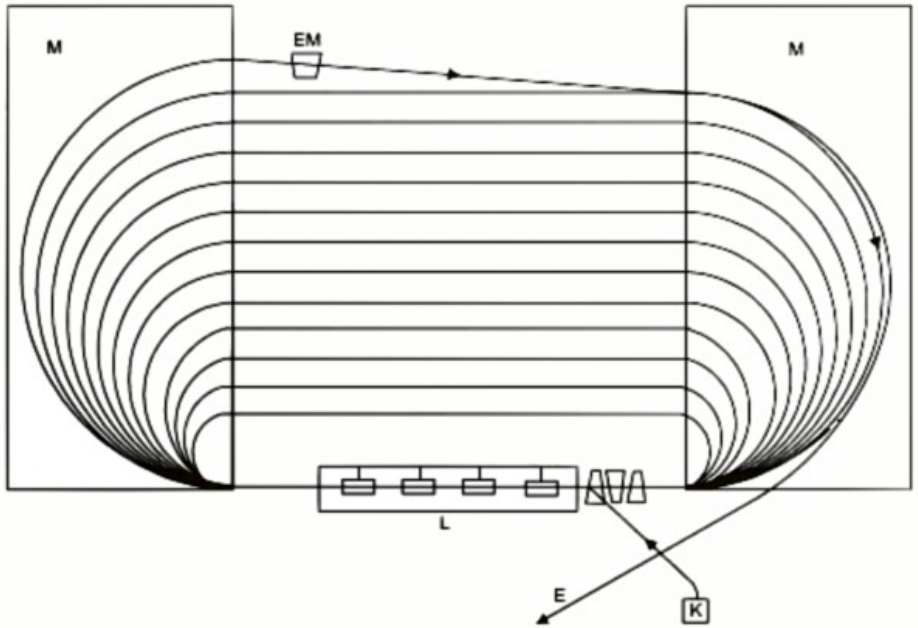
Cyclotron

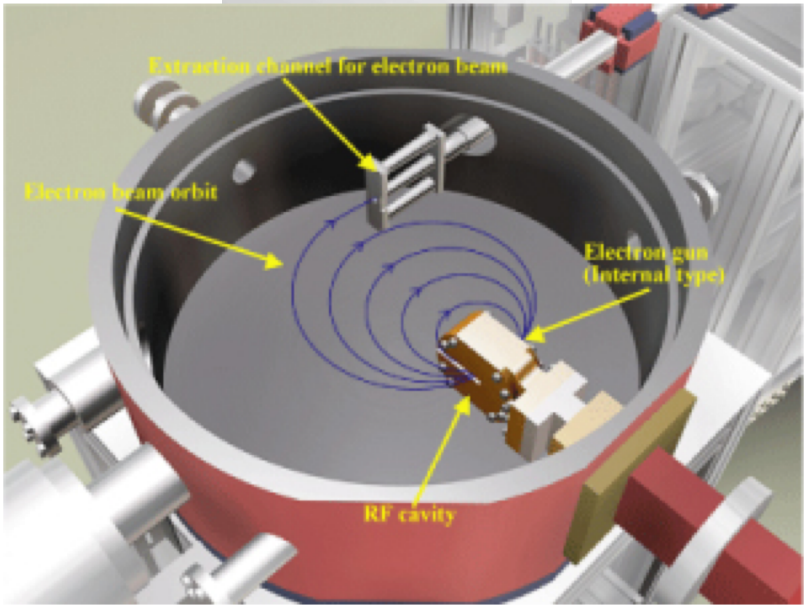


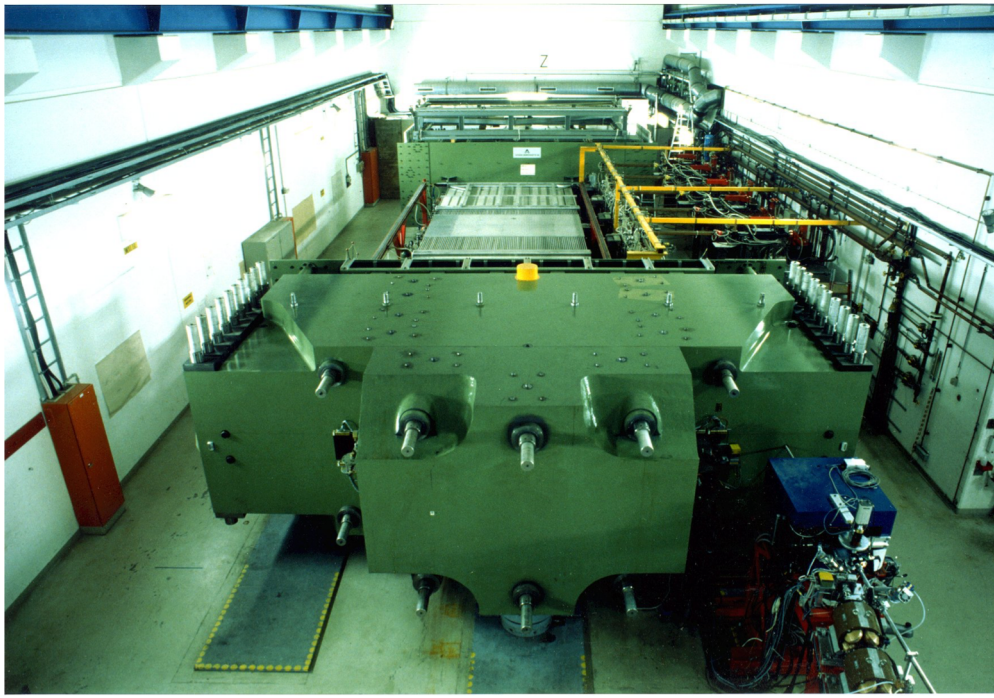

Alternating-voltage source
Path of particle
Vacuum chamber
Dees
To vacuum pump
Particle source
Target
Magnet (top magnet not shown)

Microtron


A
S
M


M
EM
M
L
E
K


Extraction channel for electron beam
Electron beam orbit
Electron gun
(Internal type)
RF cavity



Betatron

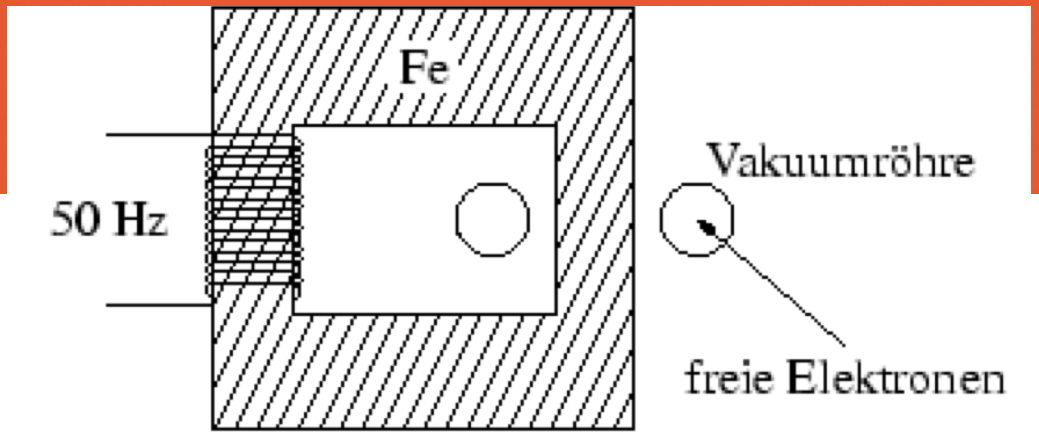
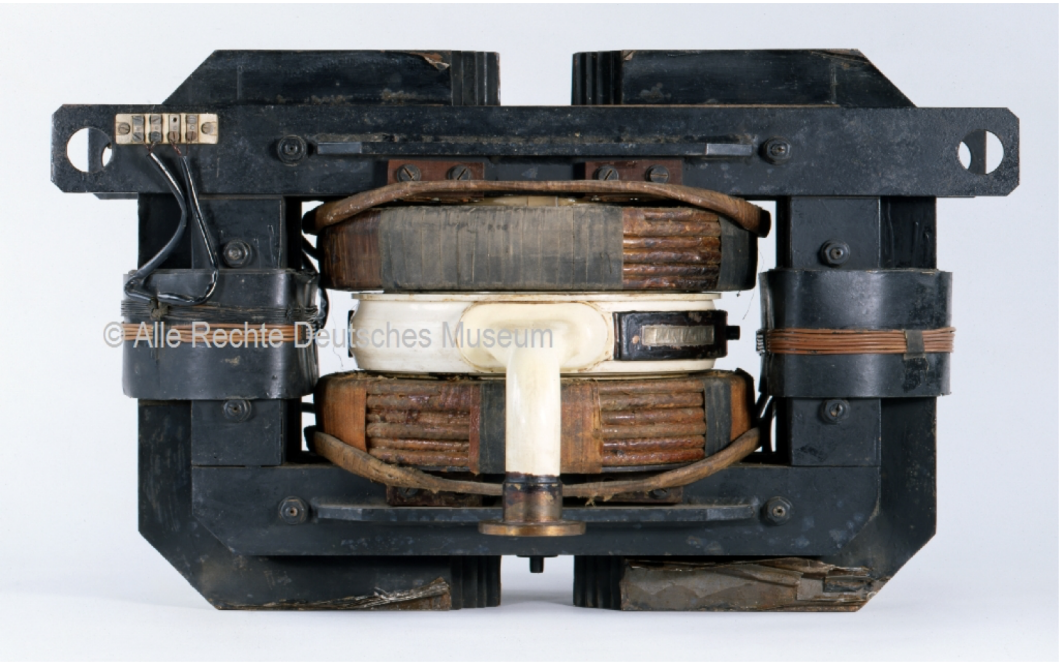


Abb. 2.7: Schematische Darstellung eines Betatrons



6 MeV Betatron