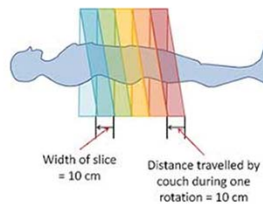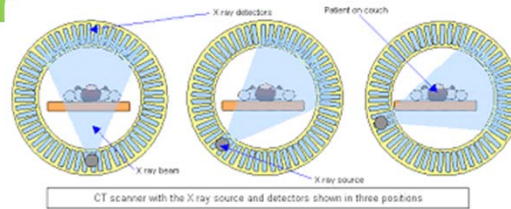# CAT Scanner

Roberto Marabini

Software developed for EM 3D reconstruction is used by default in the XR-field. Therefore researche
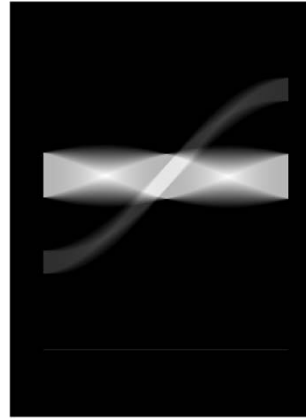
CAT Scanner

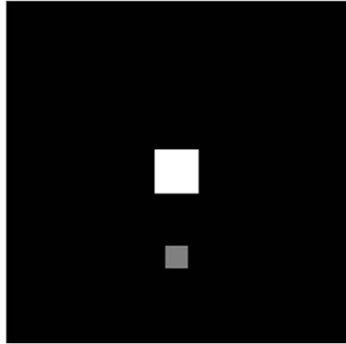CT scanner with the X ray source and detectors shown in three positions

Width of slice = 10 cm

Distance travelled by couch during one rotation = 10 cm

Reconstruct a single slice of an object using x-ray projections

1) Where are the detectors

Y = detector
X = angle

Properties of CT: Contrast
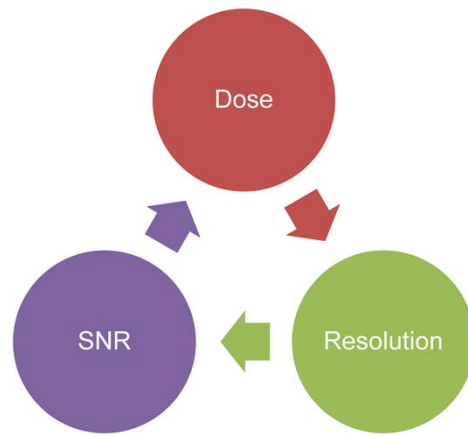
- CT is great for distinguishing _____ from ___. Why?
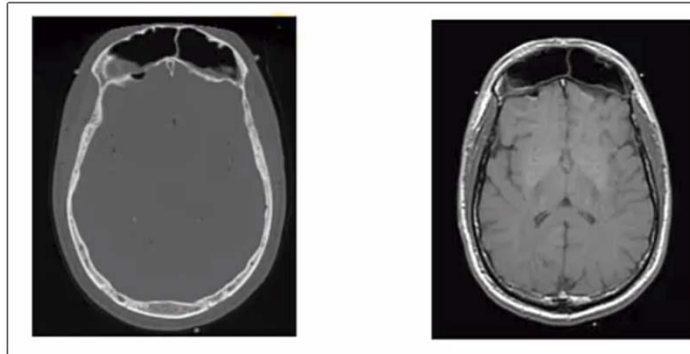
Contrast agents

1) Bone from soft tissue. Z^3
2) X-Ray vs NMR

We could achieve higher resolution & higher SNR if we increase X-ray dose. Scanner shou