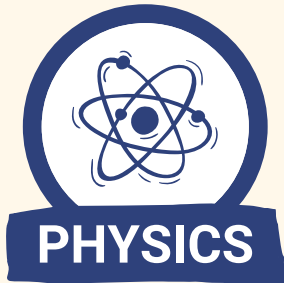


ARTEFACTS



beam hardening
falsely bright outlines or streak artefact between dense targets such as bones / contrast media.

reduce with: inbuilt corrections

partial volume effect
materials with very different HU encompassed by one voxel get averaged out.

reduce with: smaller voxels in newer scanners

photon starvation
streak artefact behind highly-attenuating features such as metal.

reduce with: improved mA modulation / iterative recon

noise
usually quantum-limited, can be more of an issue for larger patients

reduce with: recon filter, increased mA / slice thickness



motion
clothing
contrast



ring artefact
usually caused by poorly calibrated detector elements.

reduce with: recalibration

out of field artefact
patient outside the field of view causes streaks or areas of unusually high / low HU.

reduce with: patient positioning

windmill artefact
streaks on helical scans that rotate as you scroll through the z-axis

reduce with: decreased pitch

