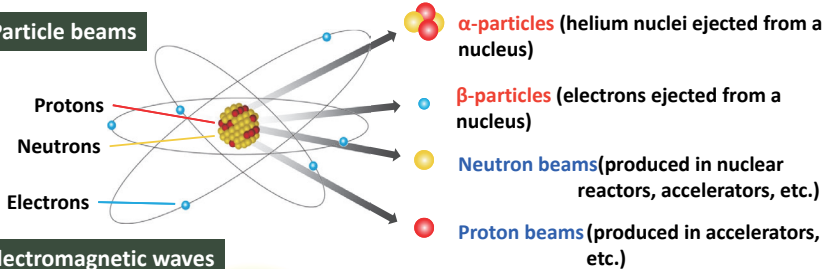


Types of Ionizing Radiation

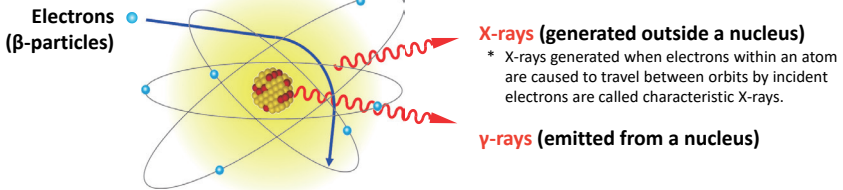
Ionizing radiation

Radiation that causes ionization

Particle beams



Electromagnetic waves



Particle beams include α (alpha)-particles, β (beta)-particles, neutron beams, etc.

α -particles are helium nuclei consisting of two protons and two neutrons that have been ejected at high speed, while β -particles are electrons ejected from a nucleus. Particle beams also include neutron beams and proton beams.

γ -rays and X-rays are types of electromagnetic waves. While α -particles, β -particles, and γ -rays are emitted from a nucleus, X-rays used in X-ray examination for medical checkups and the like are electromagnetic waves generated outside a nucleus. X-rays generated in X-ray tubes are used in X-ray examination. X-rays include braking X-rays and characteristic X-rays (p.16 of Vol. 1, "X-rays for Medical Use and Generators").

(Related to p.13 of Vol. 1, "Where does Radiation Come from?," and p.14 of Vol. 1, "Types of Radiation")

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