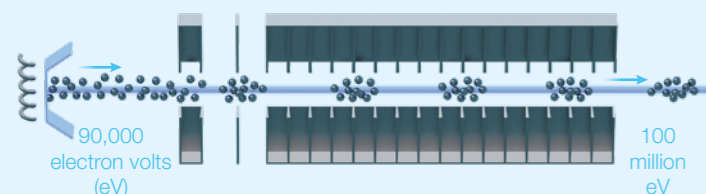


ACCELERATORS

Electrons are emitted and accelerated

1. ELECTRON GUN

Metallic surface heated to more than 1,000°C that emits electrons (•)

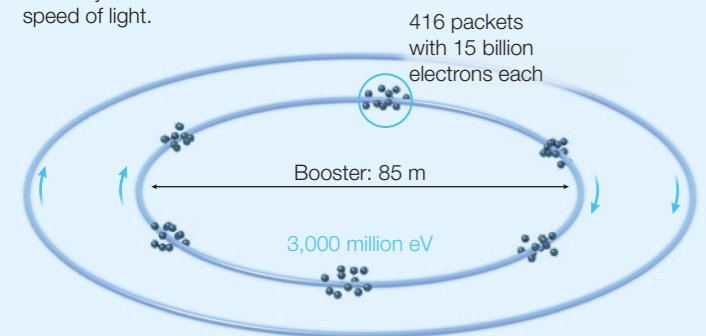


2. LINEAR ACCELERATOR

Radio frequency cavities group electrons into packets and accelerate them.

3. BOOSTER

The inner ring accelerates the electrons until they reach 99.9999985% of the speed of light.



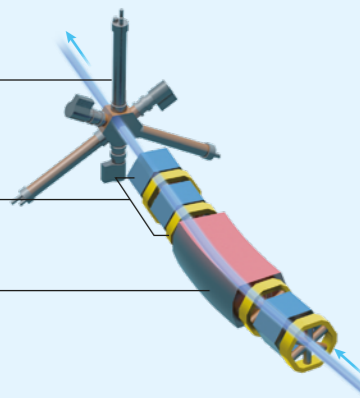
4. STORAGE RING

The electrons pass to the outer ring, where they rotate a million times per second, maintaining their speed and energy.

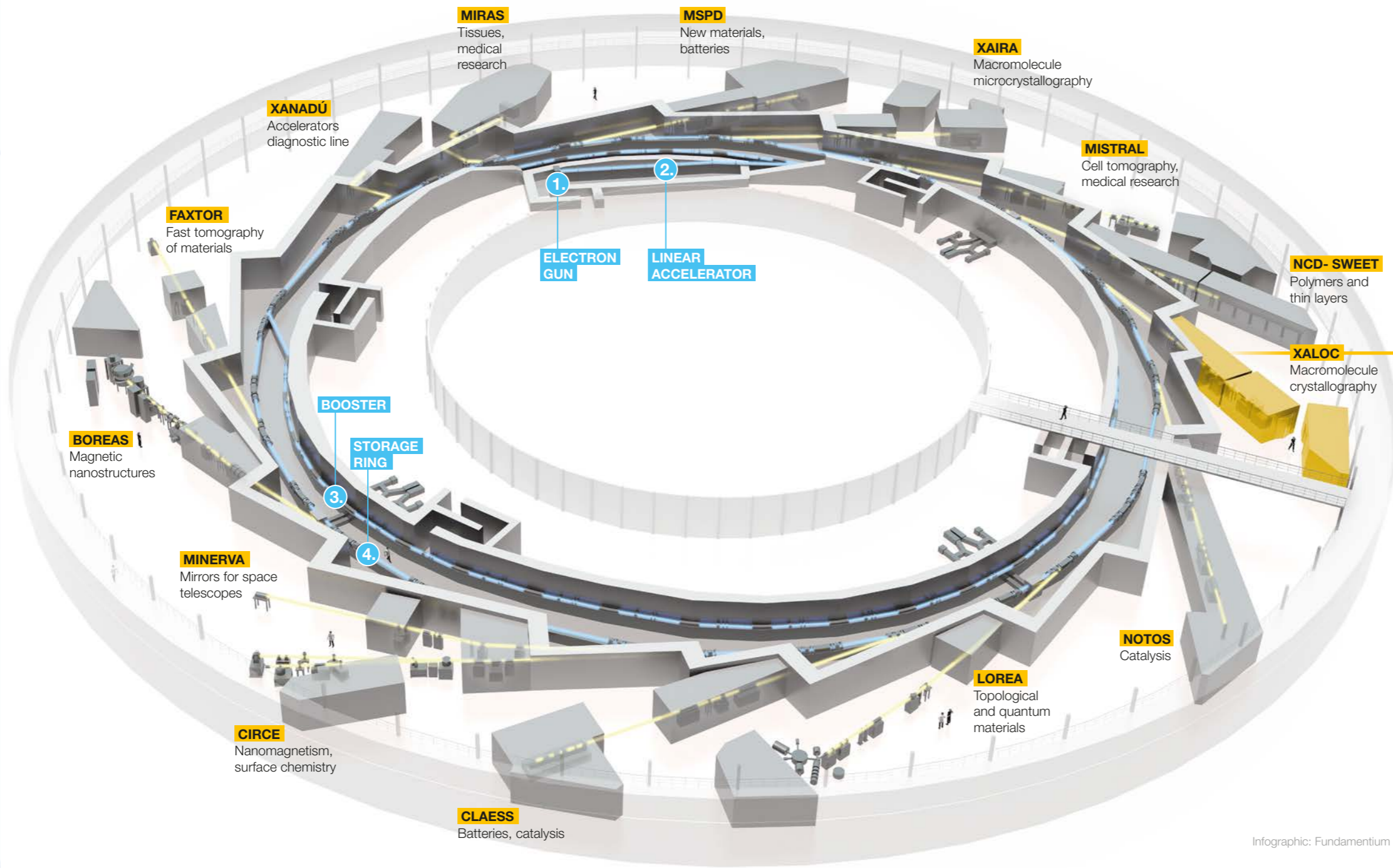
Radio frequency cavities accelerate electrons supplying them with energy

Focusing magnets focus the electron beam

Bending magnets define the circular trajectory



THE ALBA SYNCHROTRON



Infographic: Fundamentium

BEAMLINES

The light emitted by the electrons is used for research

1. EMISSION OF SYNCHROTRON LIGHT

In insertion devices, the electron trajectory is bent several times to emit large amounts of radiation: the synchrotron light.

