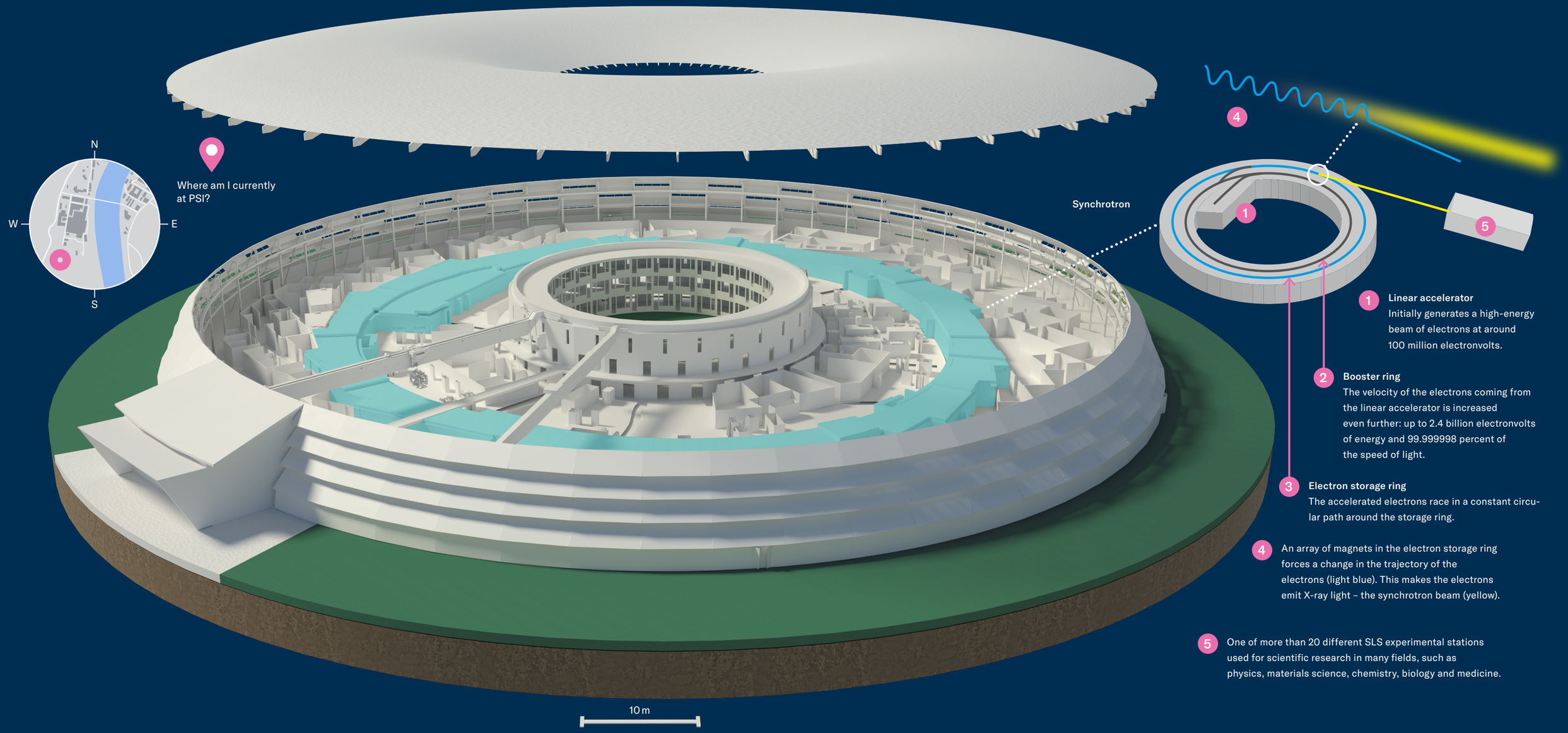
3D view: Swiss Light Source SLS



1 Linear accelerator
Initially generates a high-energy beam of electrons at around 100 million electronvolts.

2 Booster ring
The velocity of the electrons coming from the linear accelerator is increased even further: up to 2.4 billion electronvolts of energy and 99.999998 percent of the speed of light.

3 Electron storage ring
The accelerated electrons race in a constant circular path around the storage ring.

4 An array of magnets in the electron storage ring forces a change in the trajectory of the electrons (light blue). This makes the electrons emit X-ray light – the synchrotron beam (yellow).

5 One of more than 20 different SLS experimental stations used for scientific research in many fields, such as physics, materials science, chemistry, biology and medicine.