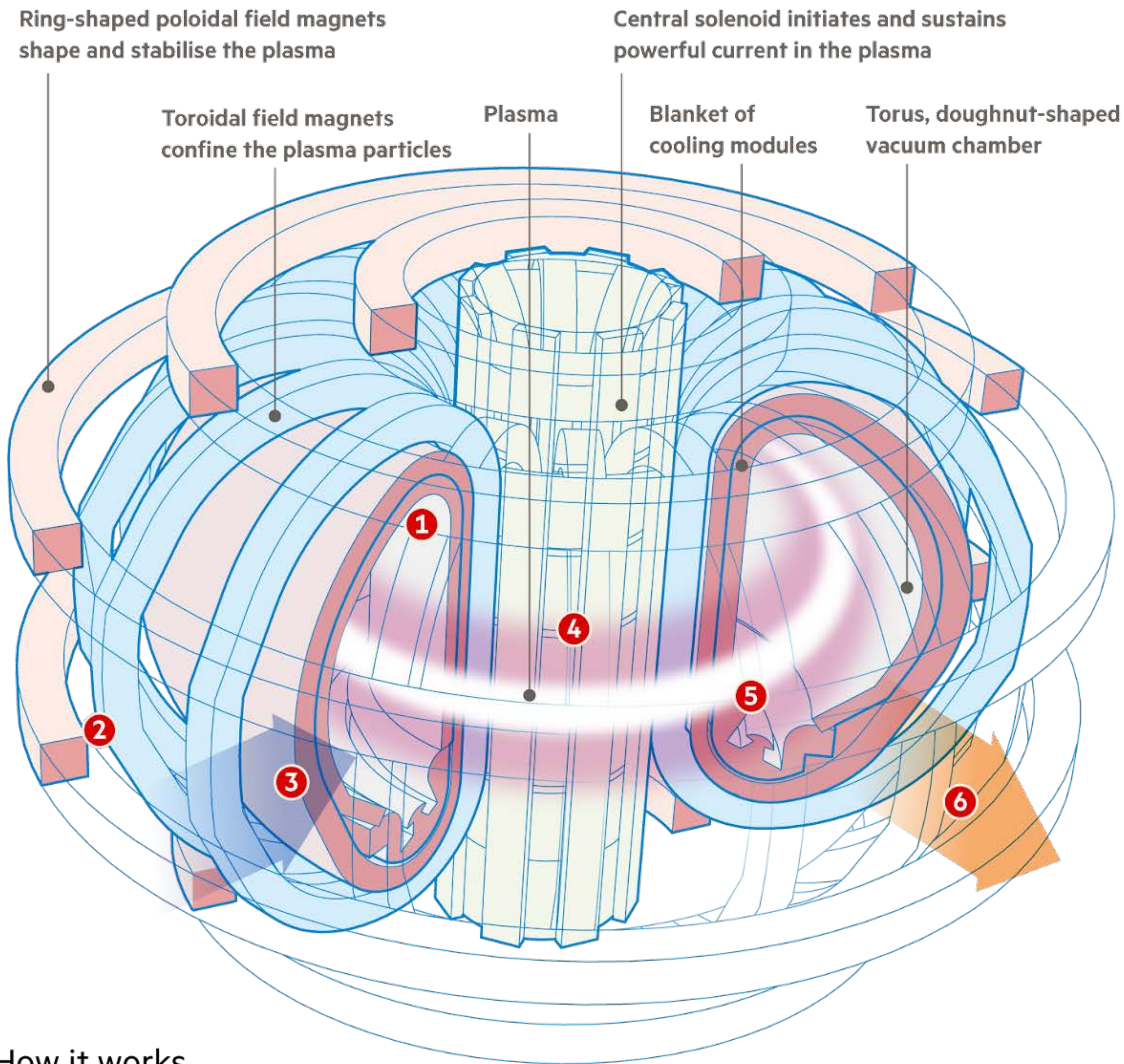


Magnetic confinement fusion (the tokamak)



How it works

- 1 Air is extracted from the vacuum chamber, the torus
- 2 The magnets are charged up
- 3 Fuel is introduced, typically deuterium and tritium
- 4 Current is run through the torus, stripping electrons from the fuel and forming a plasma
- 5 The energised plasma particles collide and begin to heat up. Helped by auxiliary heating and confined by the magnets, they reach a condition where fusion can occur
- 6 The heat can be transferred out for electricity generation, typically using steam turbines

Graphic: Ian Bott

Sources: US Department of Energy; ITER; UK Atomic Energy Authority

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