

A plasma confinement device (500), comprises a first magnet system (1) comprising a first plurality of concentrically arranged circular-loop coils (11, 12), comprising a first coil (11) arranged to carry a current in a first direction; and a second coil (12) arranged to carry a current in a second direction opposite to the first direction; and a second magnet system (2) comprising a second plurality of concentrically arranged circular-loop coils (21, 22), arranged with mirror symmetry with respect to the first magnet system (1) relative to a symmetry plane (P) located between the first magnet system (1) and the second magnet system (2), creating an annular plasma confinement area (206) at the symmetry plane (P) with a magnetic field normal to the symmetry plane (P) at the symmetry plane (P).