

Fusion Energy

Fusion machines

PIHTI-2024



JT-60SA

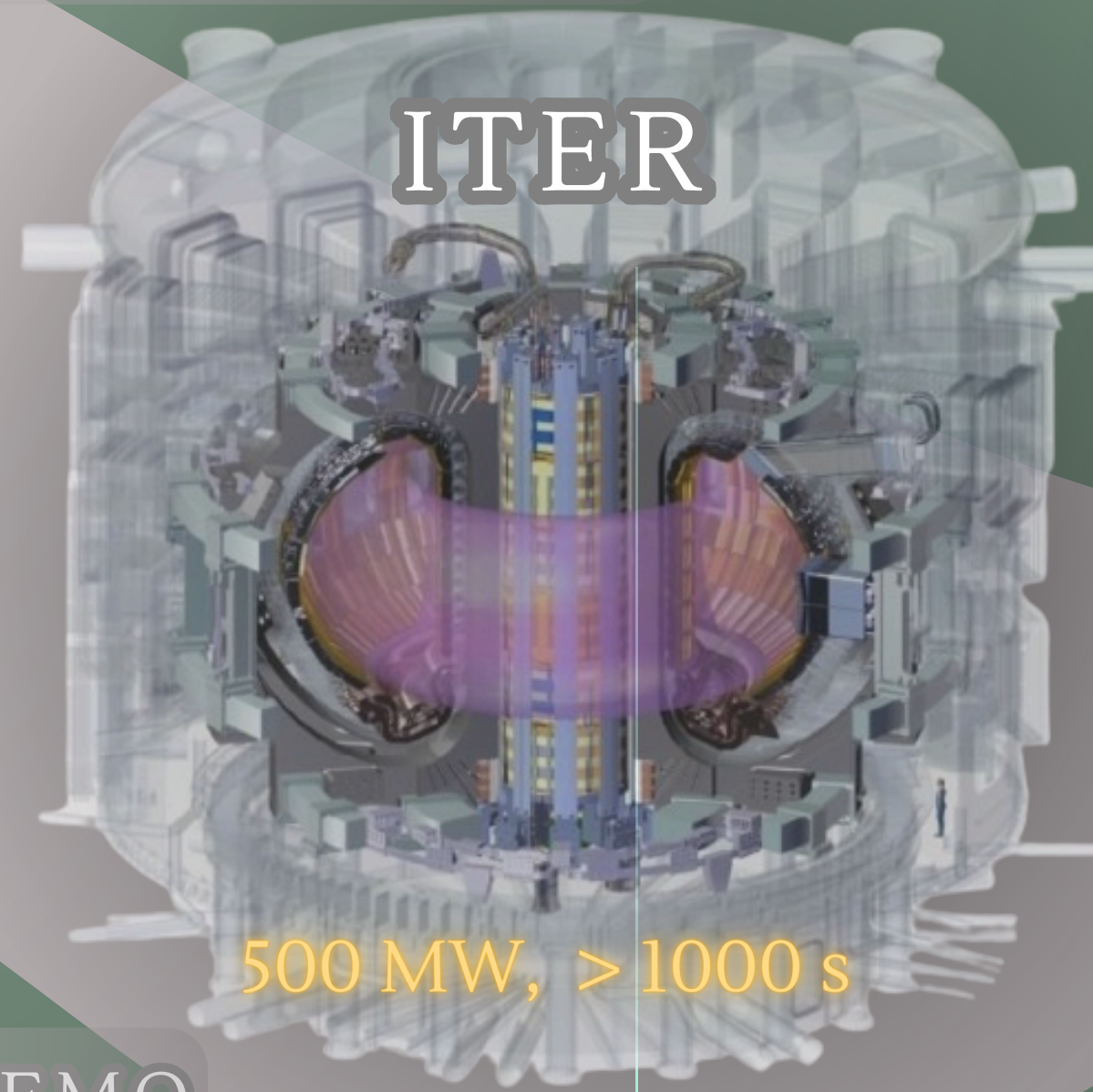
41 MW, 100 s, $>100 \times 10^6$ K

A tokamak plasma was achieved in JT-60SA for the first time on 23 October 2023, making it the world's largest operational superconducting tokamak to date.

EAST

7.5 MW, 102 s, 100×10^6 K

On April 12, 2023, EAST achieved the world's first 403-second steady-state H-mode plasma.



ITER

500 MW, >1000 s



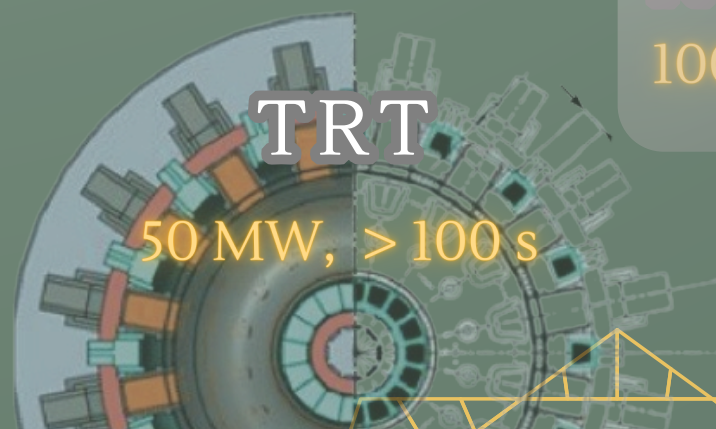
KSTAR

14 MW, >100 s

A new world record of 48 seconds at 100 million degrees H-mode operations

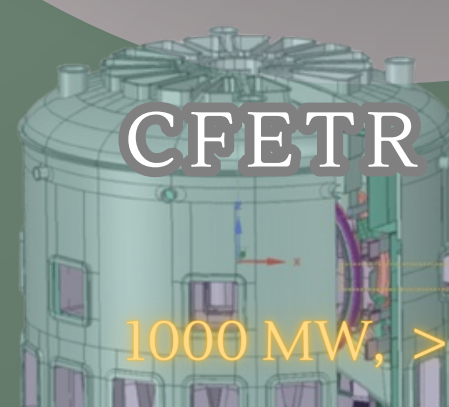
KO-DEMO

1000 MW



TRT

50 MW, >100 s



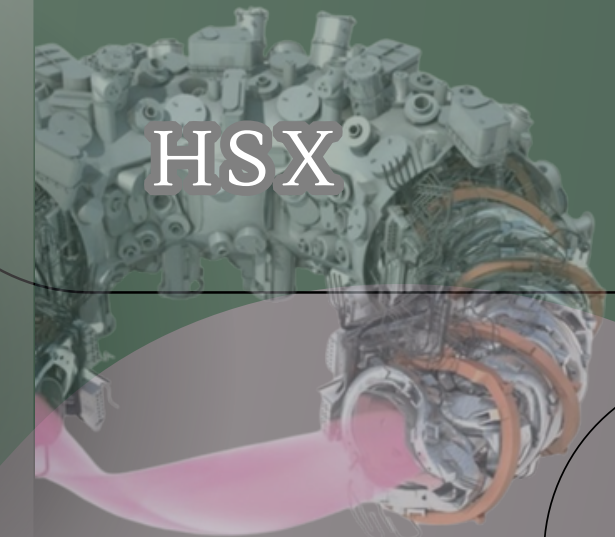
CFETR

1000 MW, >1000 s



JA-DEMO

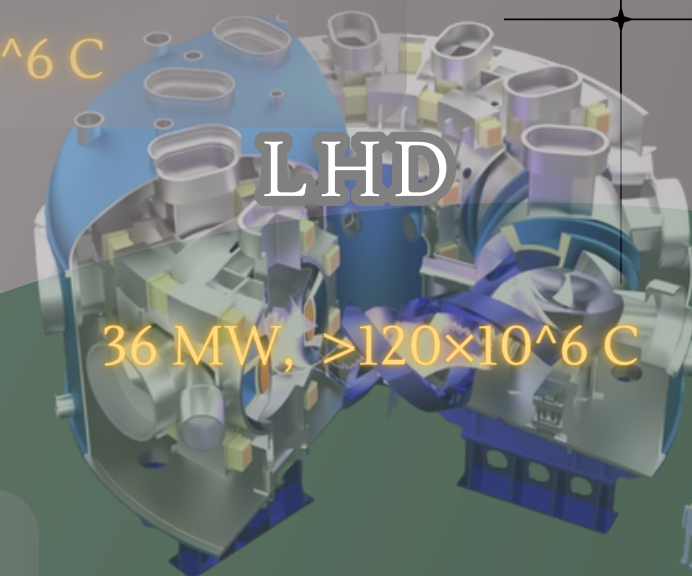
1200 MW



HSX

WENDELSTEIN 7-X

14 MW, $60-130 \times 10^6$ C



LHD

36 MW, $>120 \times 10^6$ C

STEP

EU-DEMO

1500 MW, >1000 s

BEST

200 MW



SPARK

50 MW, 10s, 80×10^6 K