



## SYNCHROTRON SOURCE WITH FREE ELECTRON LASER «SYLA» (PROTVINO)



### PASSPORT OF THE OBJECT

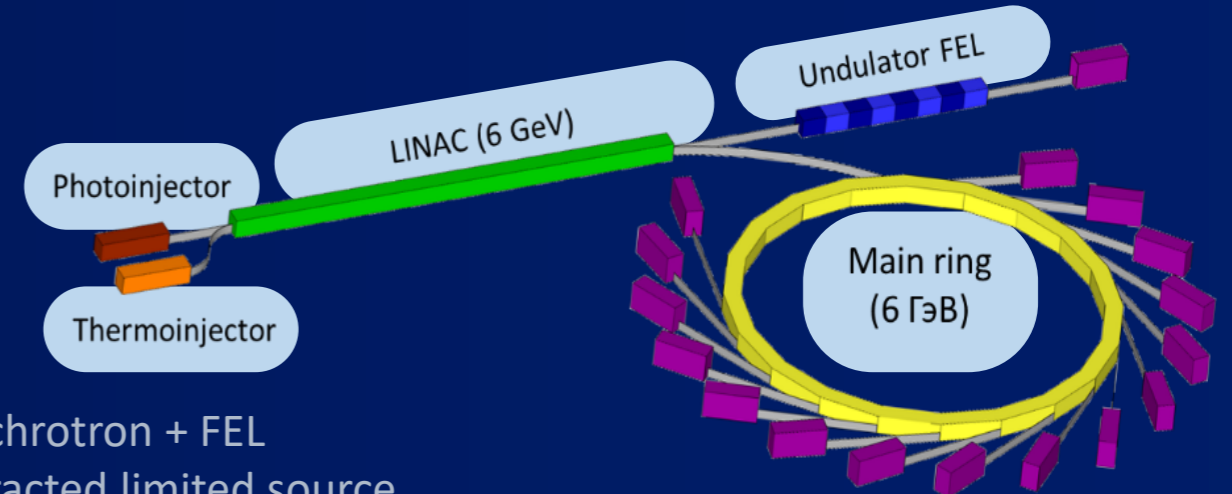
Responsible organization  
NRS «Kurchatov institute» - Institute of high energy physics

Total area - 189 450 m<sup>2</sup>

Put into operation - 2036

1<sup>st</sup> Stage Research beamlines – 12 (Synchrotron source),  
4 (XFEL)

Maximum beamlines – 52



- Synchrotron + FEL
- Diffracted limited source
- High (complete) spatial coherence
- Brilliance more then  $10^{23}$  ph/sec (Synchrotron)
- Femtosecond resolution (FEL)
- Brilliance more then  $10^{30}$  ph/sec (FEL)
- Photon beam energy 20 eV-300 KeV, XFEL wavelength - 0,5 – 1 A

Configuration 9 – bend achromat - 6 GeV, emittance < 70 pm\*rad  
40 superperiods, sections and linear gaps (1100m)

