APS BRILLIANCE

SPEC

ε_x 8nm κ 10% I = 100mA B $1-3 \times 10^{18}$

NOW

8nm 1% 100mA 10^{19}

NEXT 3.5nm 1% 100 mA $2-6 \cdot 10^{19}$

2.4m und → 4.5 → 10^{20}

300 mA → 3×10^{20}

0.1% → 3×10^{21}

SPRING-8

25 m und > 10^{22}

APS BUNCH LENGTH

I=0 : 20 psec FWHM

I = 10mA 50 psec

ERL < 100 fsec @ LOW I

SHOULD BE POSSIBLE

FOR AT LEAST ONE STATION