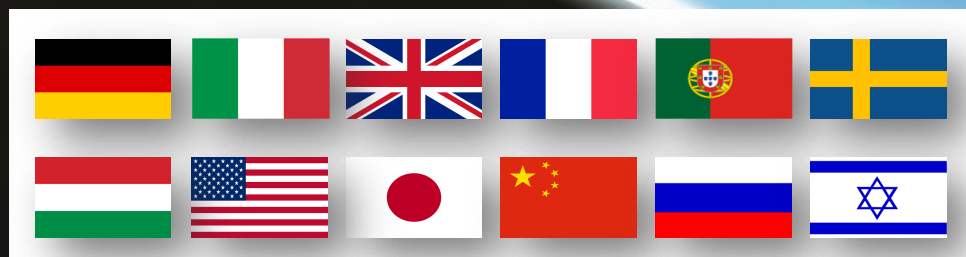


EUROPEAN
PLASMA RESEARCH
ACCELERATOR WITH
EXCELLENCE IN
APPLICATIONS



WP7 : HEP and Other Pilot Applications

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1. FEL with initial focus on *X1* (WP6)
Towards atto-second sources with pump-probe capability. 2 colour FEL scheme.
 2. *GeV class* positrons & acceleration & HEP detector tests
Best exploitation of the 500 MeV PWFA beam driver.
Outstanding temporal and spatial resolution. (GLS, AS)
 3. Compton source (CM)
Less complex with PWFA (1 laser 1 e-).
- Future: medical imaging (with betatron) (MS,ZN)

1. FEL with initial focus on *X2 (e.g. medical)* (WP6)
Towards atto-second sources with pump-probe capability
 2. *ultra-compact* positrons beam source & table top test beam
LWFA compact and efficient to produce low energy e⁻. High repetition capability. Outstanding temporal and spatial resolution. (GLS, AS)
 3. Medical imaging
Fully optical and most compact set-up. High repetition capability. Small source size combined with high flux capability. (MS,ZN)
- Future: High field physics (SM)

