

# WP -12: Accelerator Prototyping and Experiments at Test Facilities

## Objective

- Facilitate tests for concepts and prototypes developed in other work packages in various facilities
- Survey of the experimental results of the proof-of-principle tests and accelerator prototyping studies

## Requirements

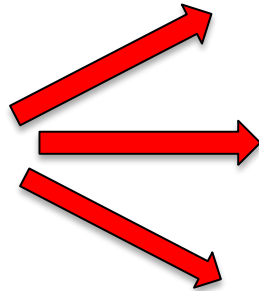
- List of concepts that needs testing from each WP
- List of capabilities and status of individual facilities – some exist as part of Laserlab
- Liaising tests with EuPRAXIA participants and test facilities
- How do we organise access for testing with individual facilities?
  - Joint experiments?
  - Key contact personnel at facilities?



Activities	Related Work Package	Potential Facilities
<b>Testing laser-driven plasma source, staging, diagnostics, mode coupling</b>	WP3- High Gradient Laser Plasma Accelerator Structure	SCAPA , STFC, LLC, LAOLA, CILEX, LOA, CALA, ELI, ILIL, SPARC_Lab,.....,
<b>Testing laser feedback and correction methods and two plasma module laser acceleration</b>	WP4- Laser Design and Optimization (LDO)	STFC, LLC, LAOLA, CILEX, LOA, CALA, ELI, ILIL, SPARC_Lab,.....,
<b>Testing and optimising electron beam properties before and after injection; development of e-beam diagnostics</b>	WP5 Electron Beam Design and Optimization	LAOLA, AWAKE, ILIL, SPARC_Lab, ELBE, STFC.....,
<b>Testing FEL parameters and performance</b>	WP6 – FEL pilot Application	SPARC_Lab, ELBE, STFC, LAOLA,
<b>Testing Application of Particle beams</b>	WP6 – FEL pilot Application	SCAPA , STFC, LLC, LAOLA, CILEX, LOA, CALA, ILPP, ELI, ILIL, ELBE, SPARC_Lab

# WP tasks

## How-to



**Use of Eupraxia web-site (M12)**

**Progress of tests including schedules and teams (M24)**

**Detailed reports on each tests (M42)**

Team

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Possible inclusions (mostly for consultation/deputising):

Dan Symes (RAL), Jim Clarke (DL), ....., .....

