EUROTeV and the ILC

Nick Walker (DESY)

CARE (ELAN) Workshop

DESY

2 November 2004

EUROTeV Proposal

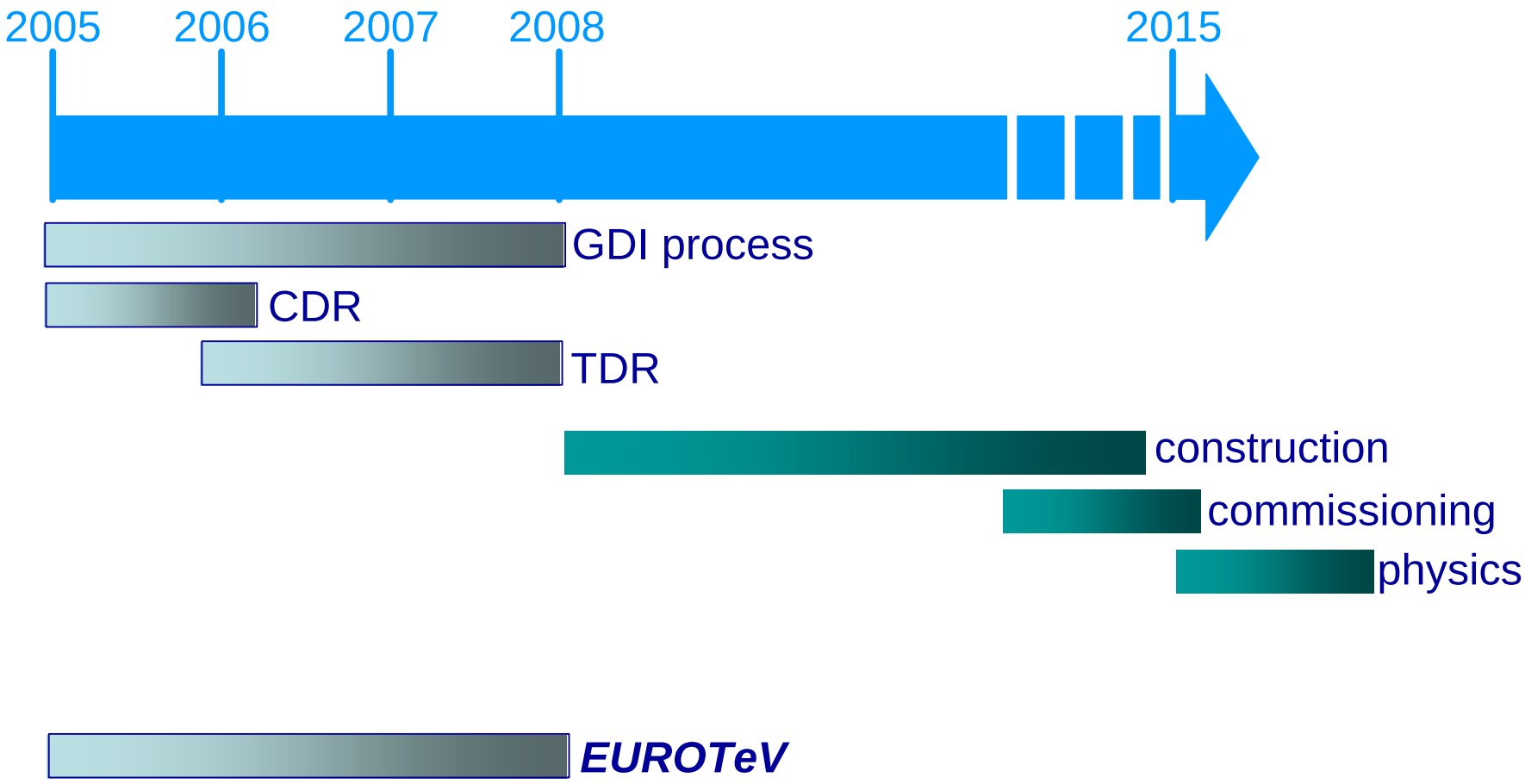
- Funded under

  Call for Design Studies for Future Infrastructure

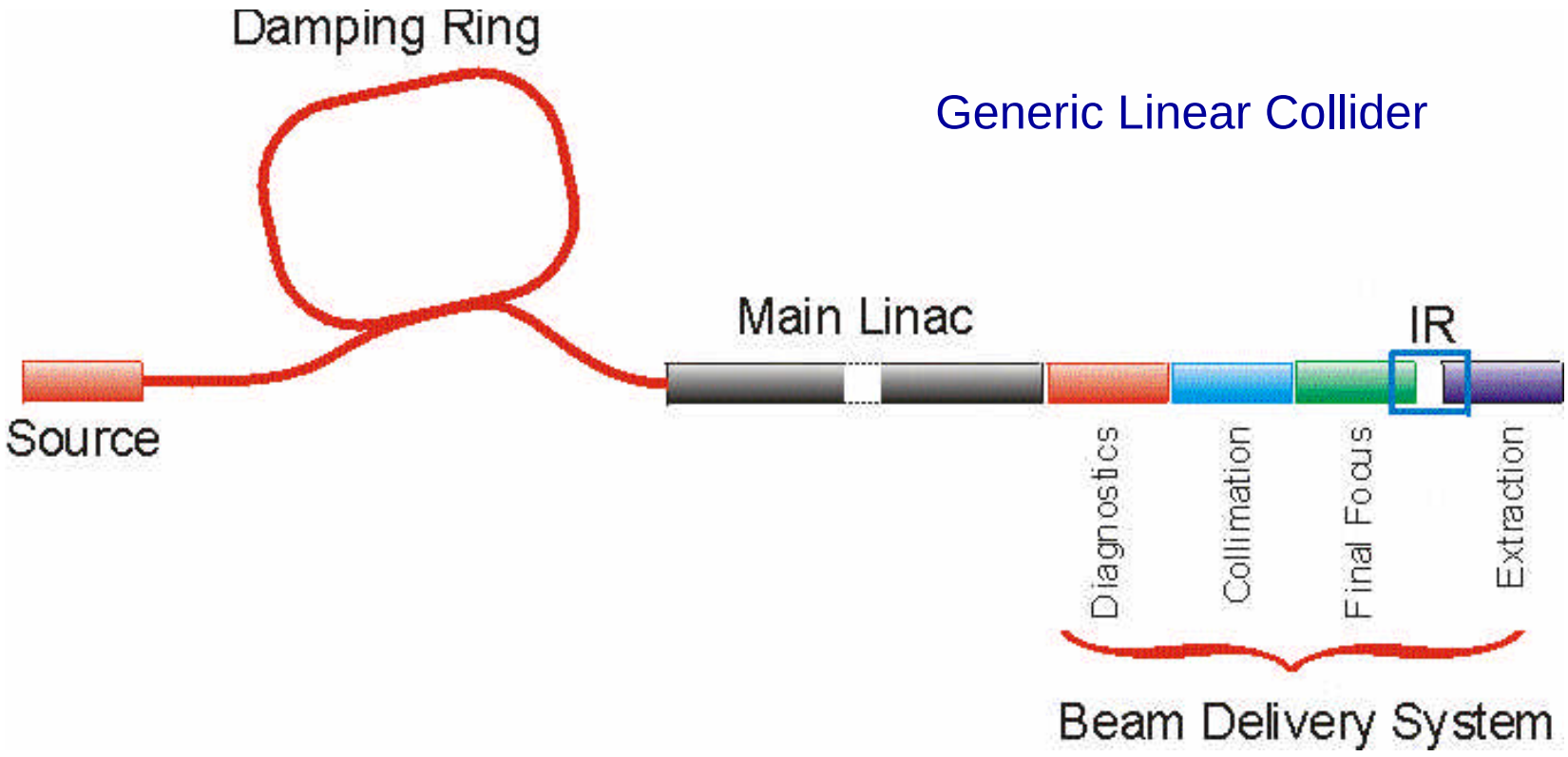
  to the EC FP6

- Proposal was to study priority ILC R&D items identified by the ILC-TRC as critical, but which were LINAC technology independent
  - Basically all other subsystems
- In addition to support R&D towards multi-TeV colliders
  - But much of so-called ‘CLIC’ R&D can also be useful for ILC

ILC Projected Time Line



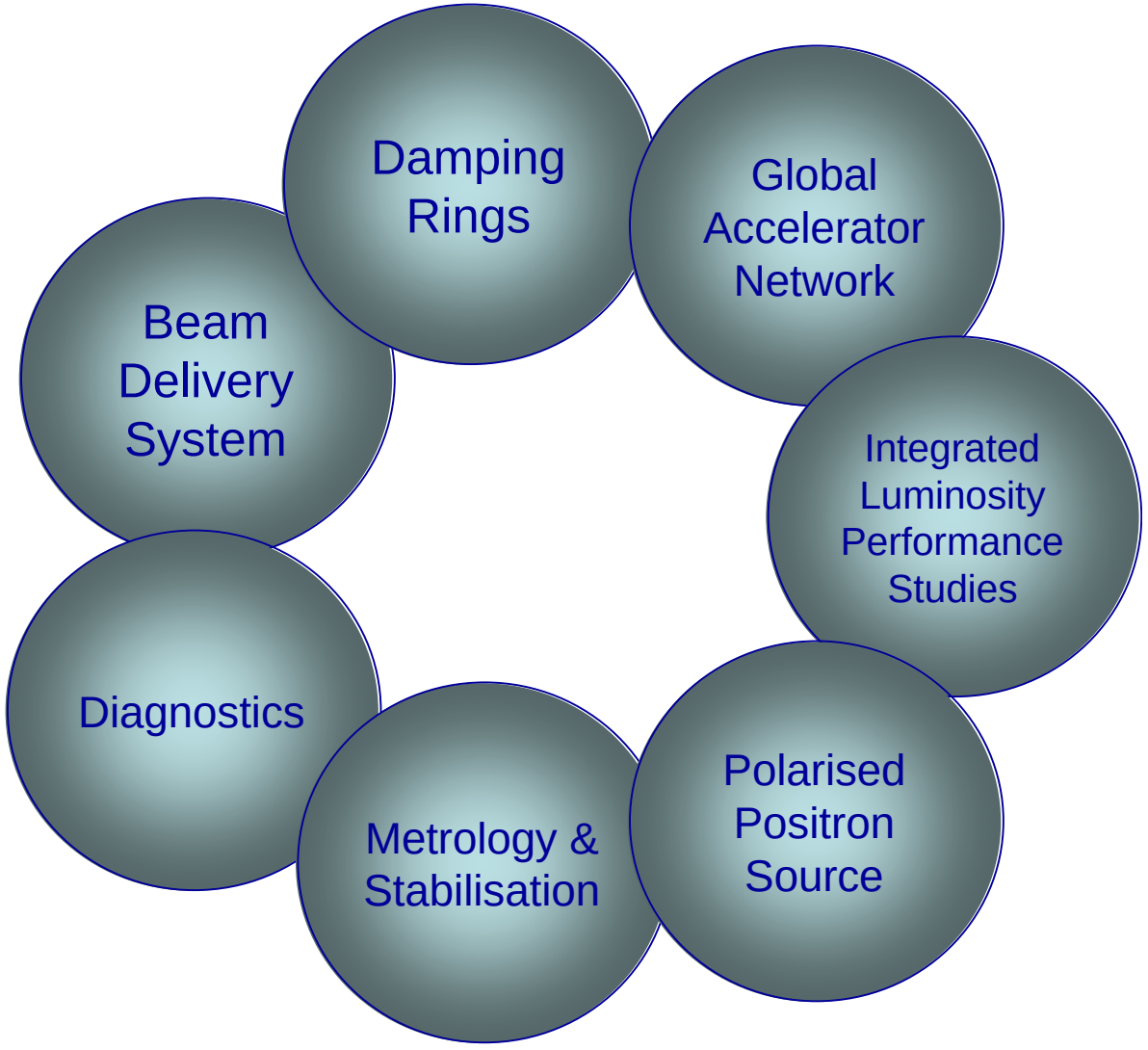
Focus of the Design Study



EUROTeV Work packages

Will form part of the
European Design Team

Initial focus on TRC tech.
Independent R&D



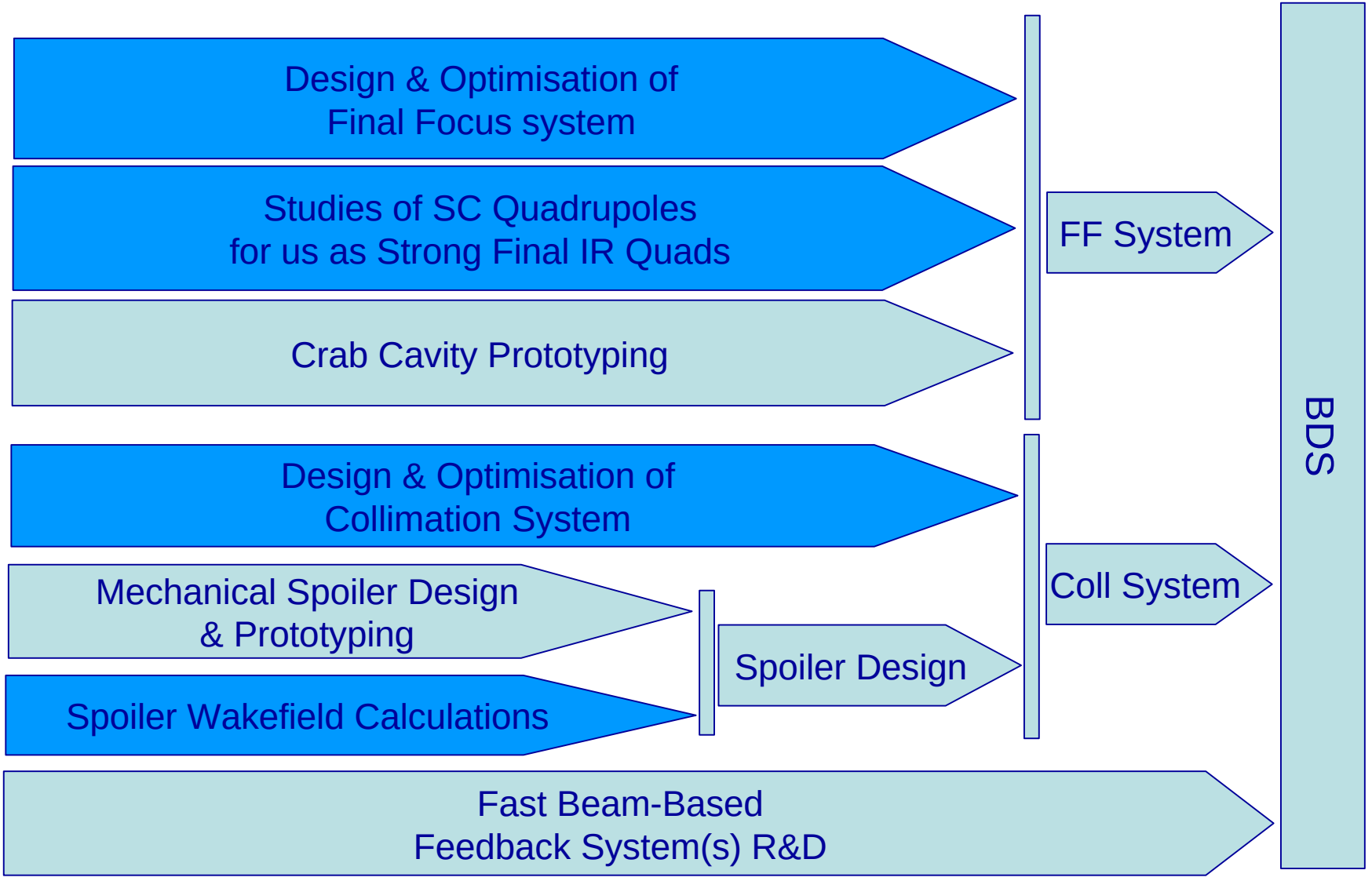
Participating Institutes

Participant	WP1	WP2	WP3	WP4	WP5	WP6	WP7	WP8
	MNGMNT	BDS	DR	PPS	DIAG	BDYN	METSTB	GANMVL
HU Berlin				●				
Birmingham		●						
Bristol						●		
Cambridge					●			
CCLRC	●	●	●	●	●	●		
CEA		●						
CERN	●	●	●		●	●		
Darmstadt		●						
DESY	●		●	●	●	●	●	●
Elettra								●
FHI-IGD								●
GSI								●
LAL								
INFN-LNF			●			●		●
Lancaster		●				●		
LAPP	●						●	
Liverpool				●				
Manchester								
Mannheim								
Oxford					●		●	
PSI						●		
QMUL		●				●		
RHUL	●				●	●		
Rostock						●		
UCL					●			
Udine								●
Uppsala					●	●		

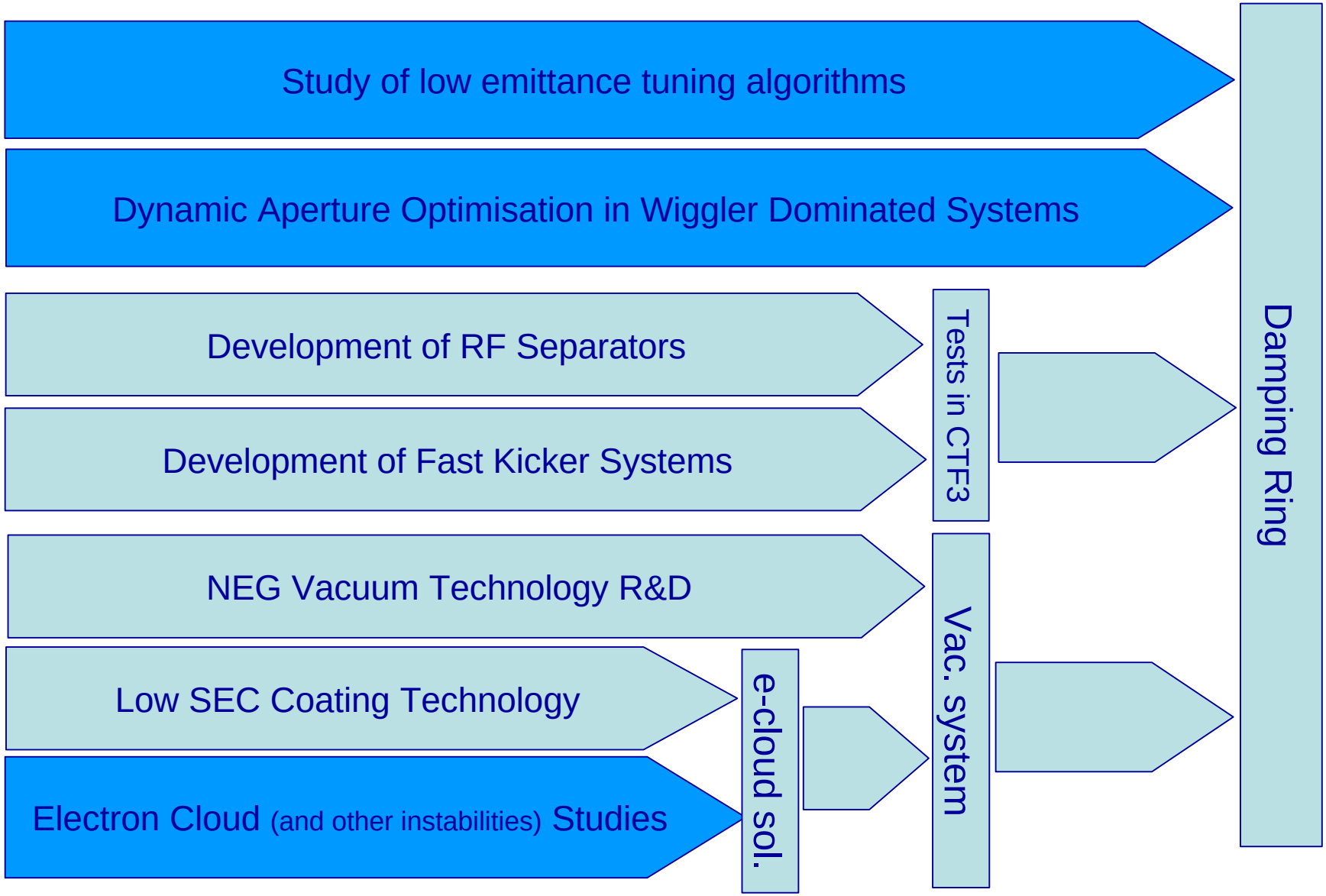
27! Institutes participate, reflecting **major European interest** in ILC project.

● Coordinating institute

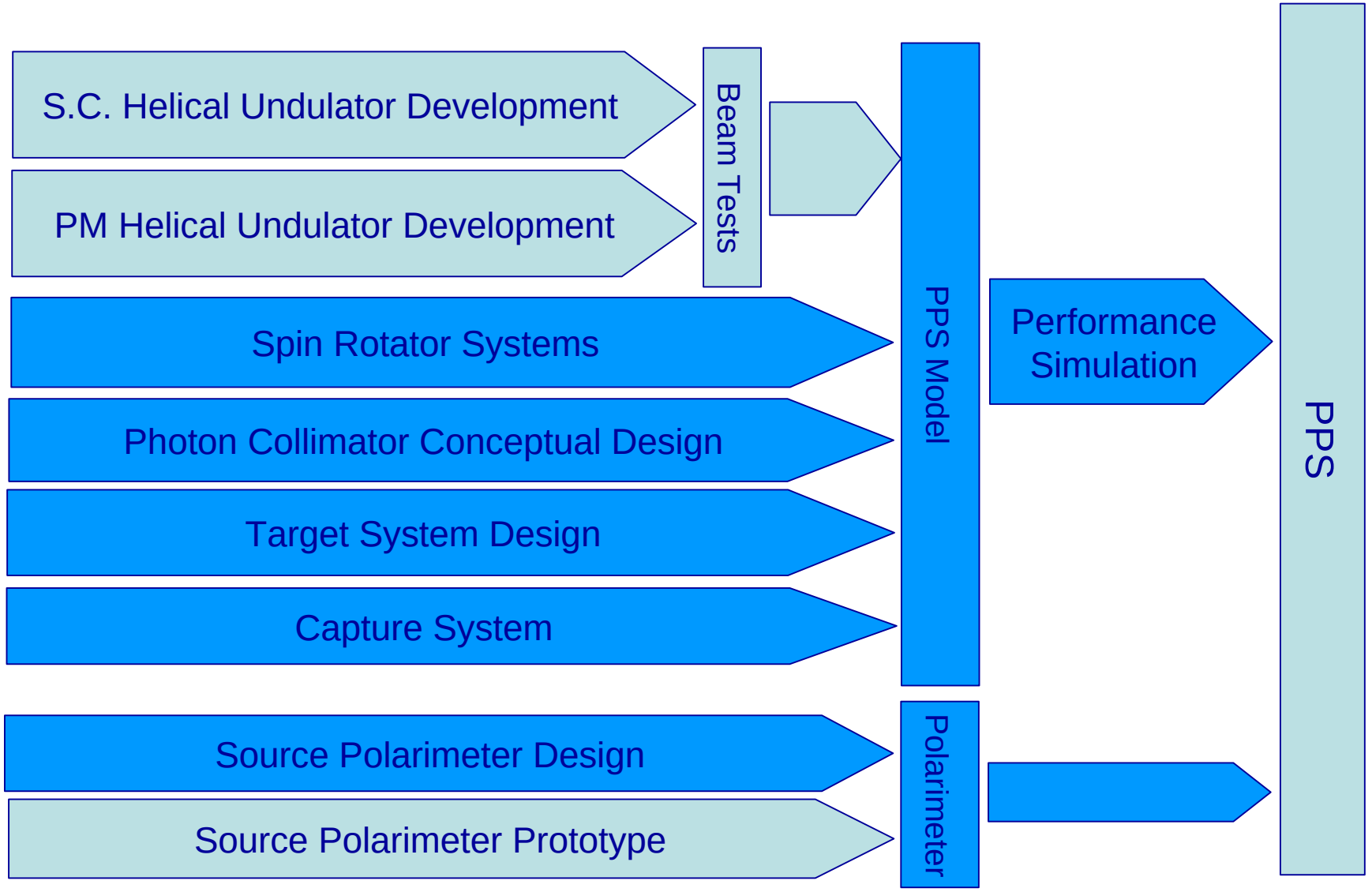
WP2: BDS (Deepa Angal-Kalinin, CCLRC)



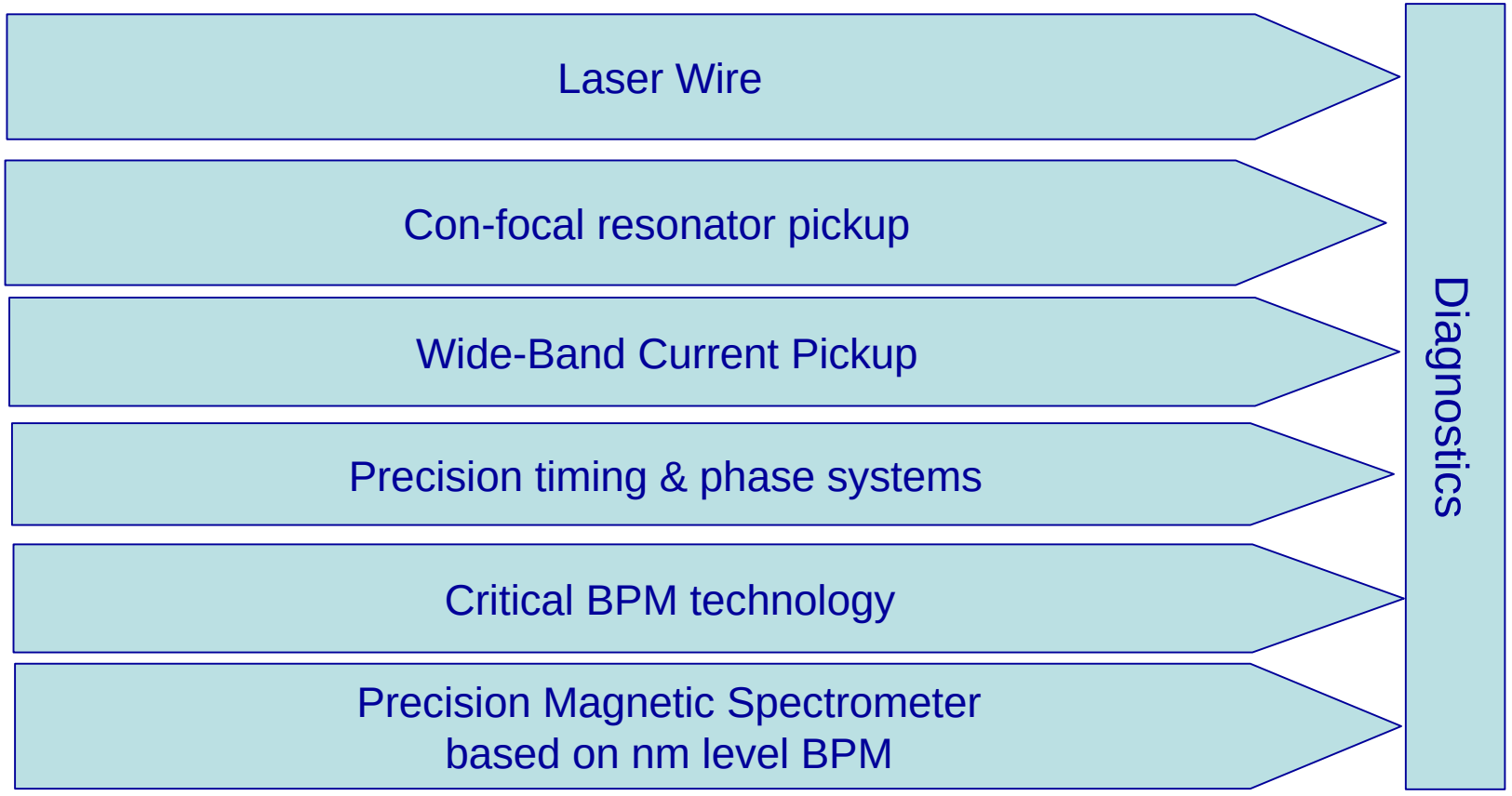
WP3 Damping Ring (Susanna Guiducci, INFN-LNF)



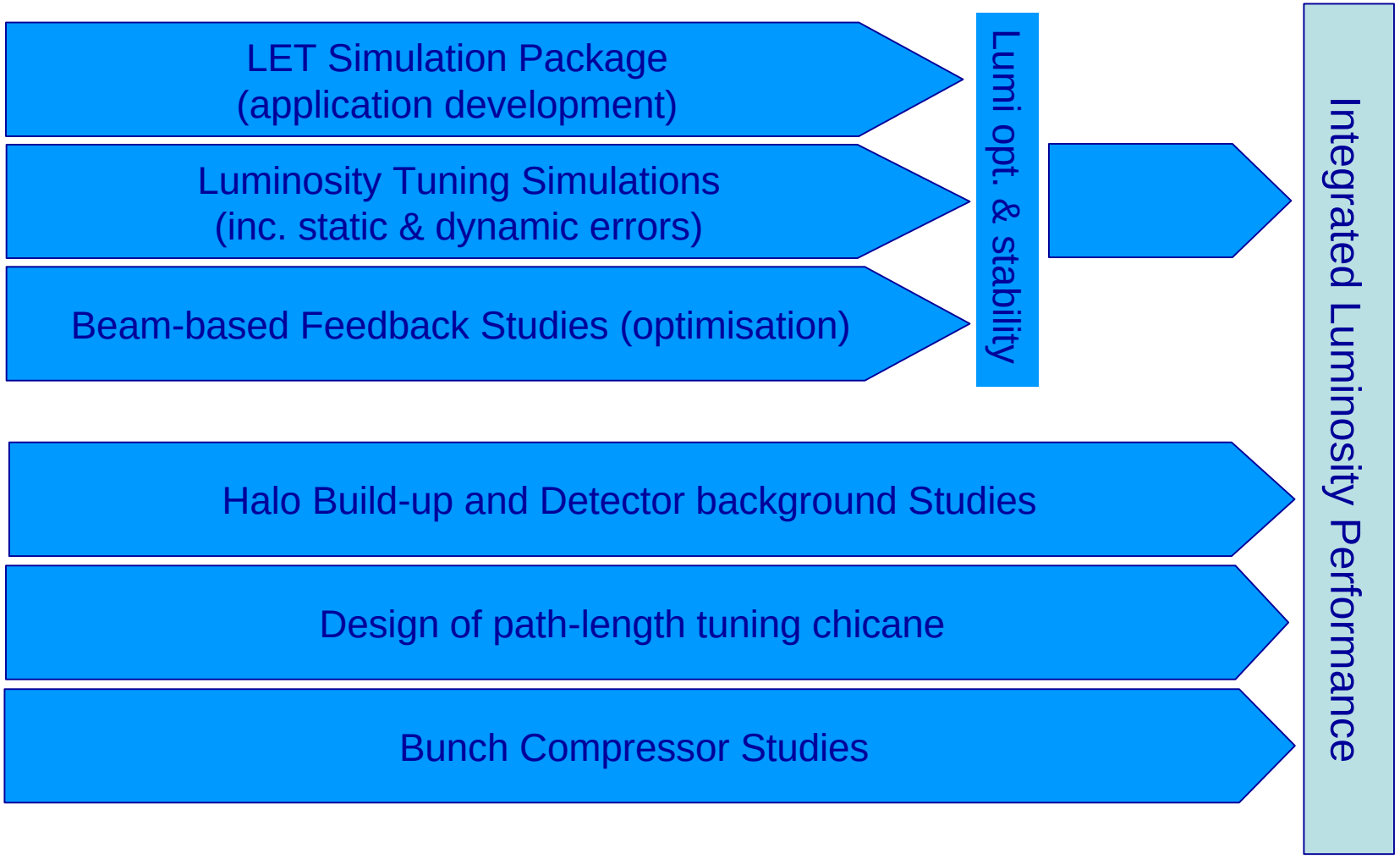
WP4: Polarised Positron Source (Jim Clarke, CCLRC)



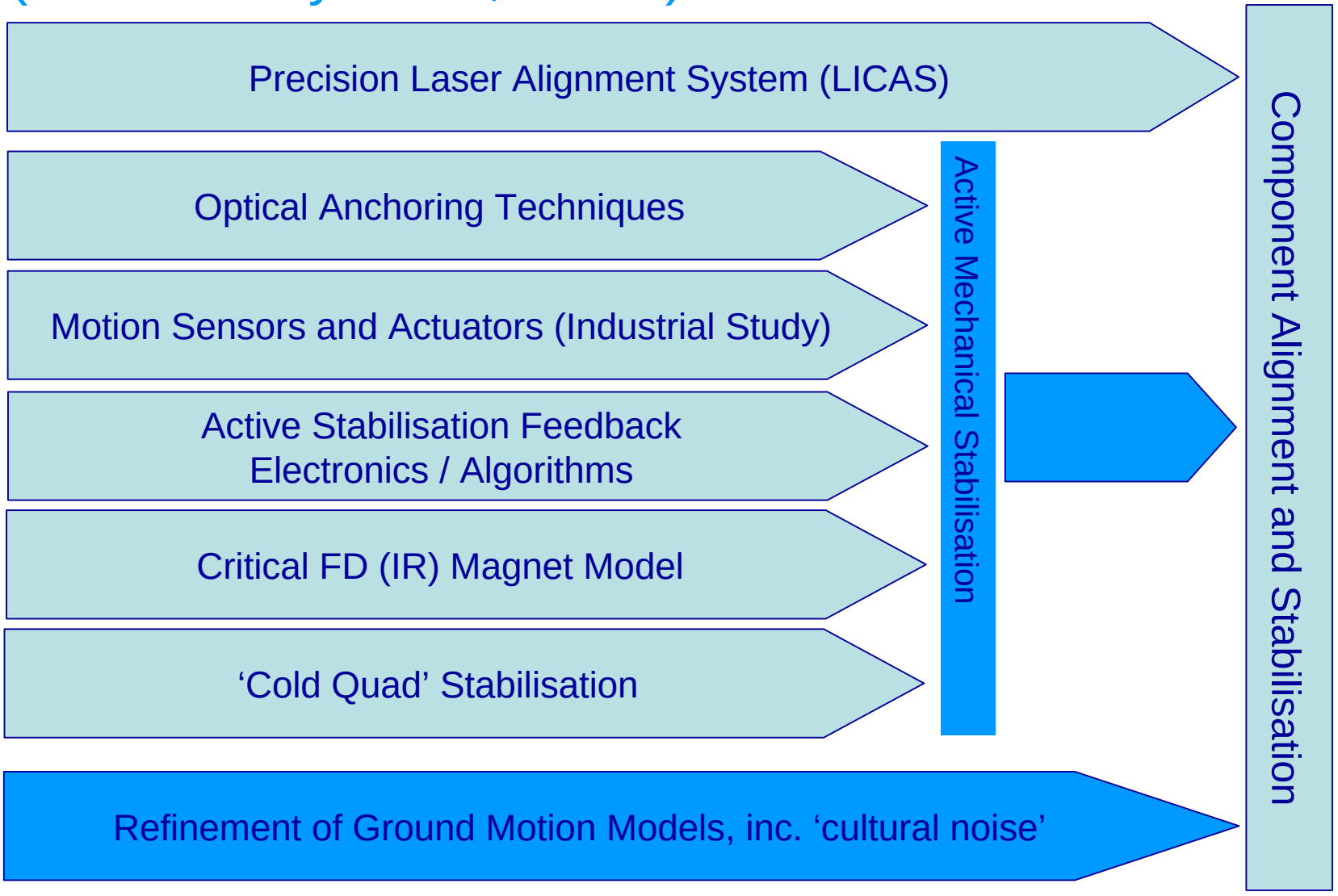
WP5: Diagnostics (Grahame Blair, RHUL)



WP6: Integrated Luminosity Performance Studies
(Daniel Schulte, CERN)



WP7: Mechanical Stabilisation and Metrology
(Yannis Karyotakis, LAPP)



WP8: Global Accelerator Network Multipurpose Virtual Laboratory (Ferdi Willeke, DESY)

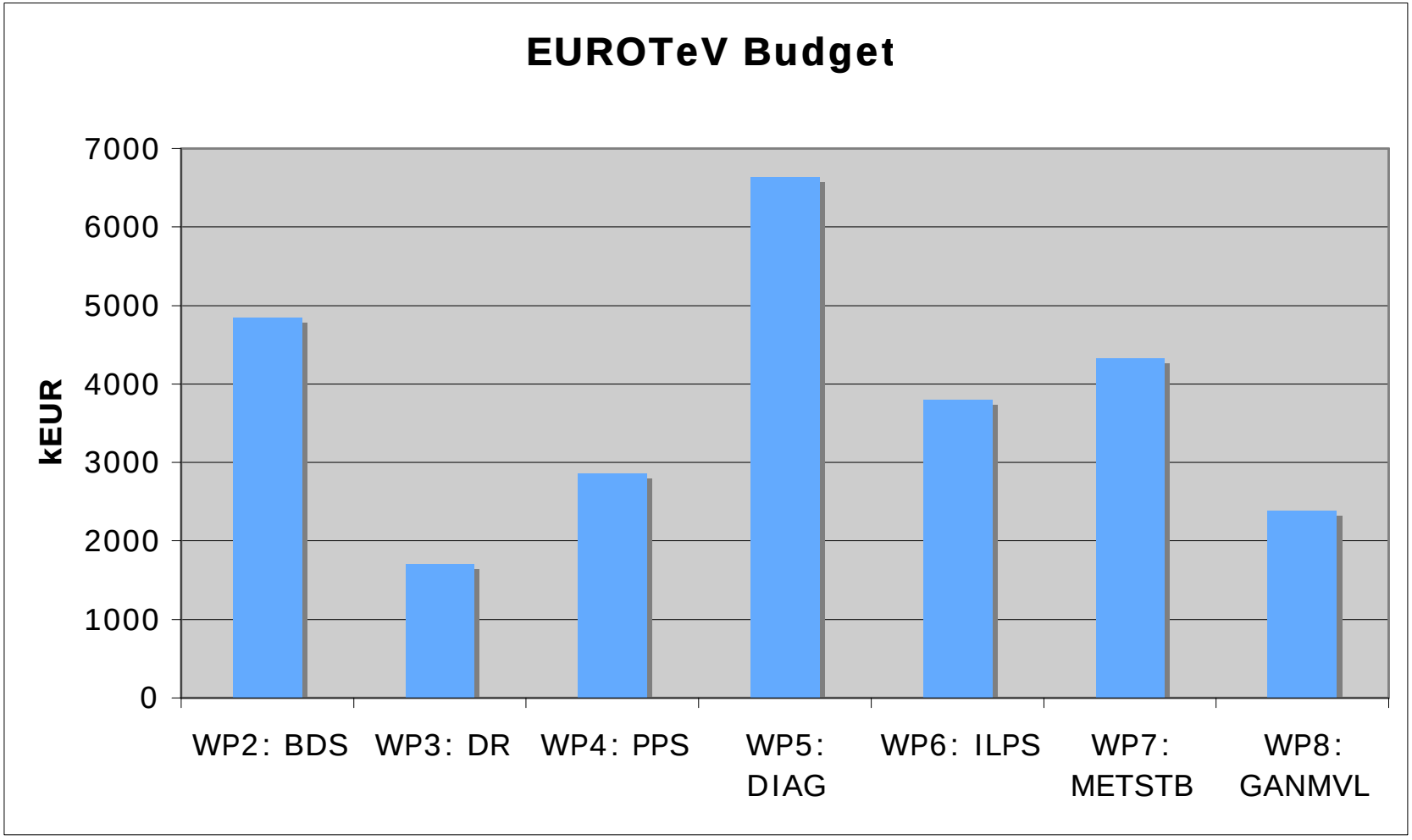
Design and build a collaborative tool for

- far **Remote Observation** and
- far **Remote Control** of **accelerator** components or experiments at accelerators

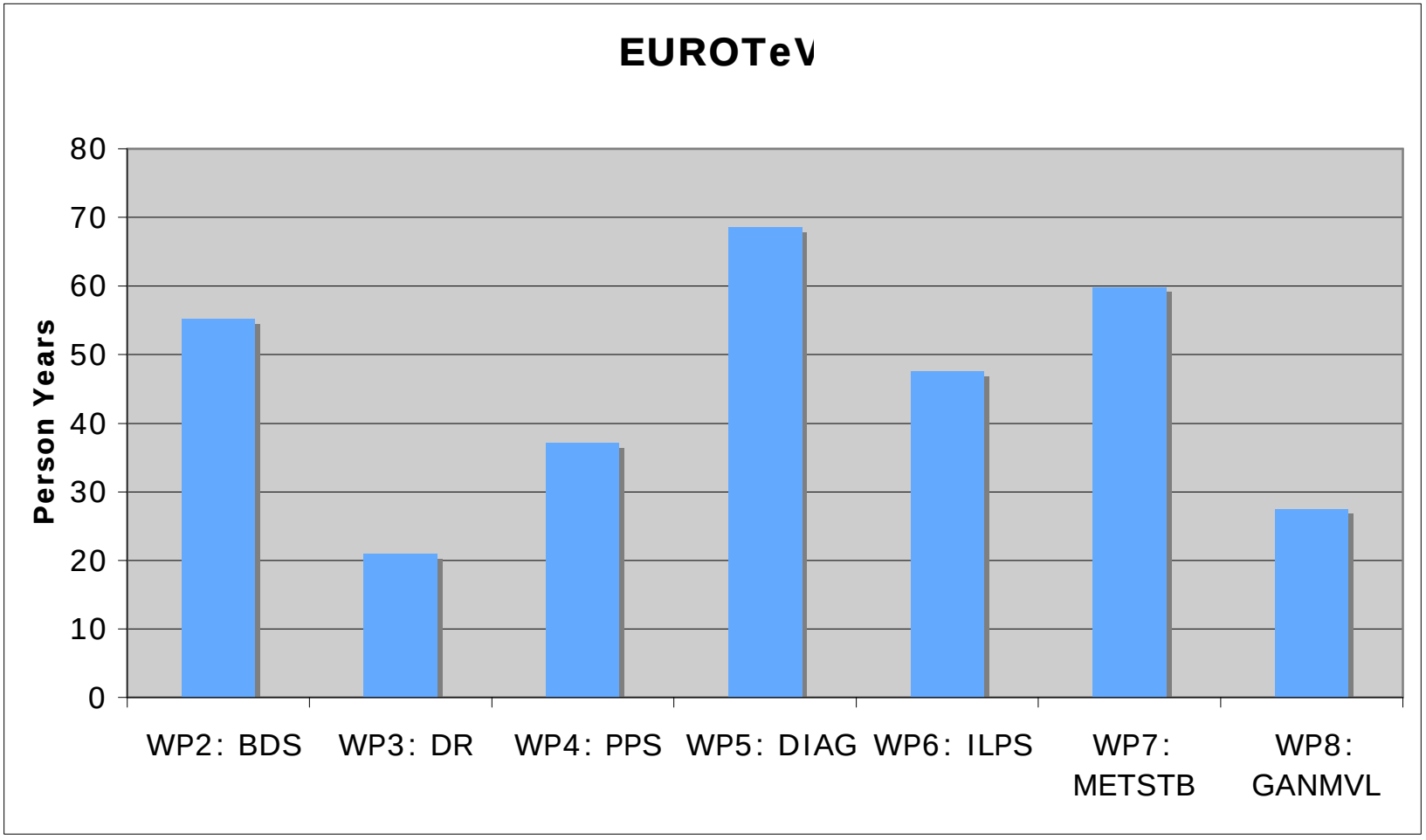
MVL will be a tool to demonstrate and gain experience that -

- accelerator components can be efficiently operated, maintained and repaired under the control of experts from remote sites
- geographically dispersed experts can work together in a virtual team

Total Budget by WP (3 years)



Total Manpower by WP (3 years)



Resource Summary (over 3 years)

- Total Budget 27.6 M€
  - EU contribution 9 M€
- 328 Person Years
  - 100 Person years funded by EU
  - (~30 new posts to be filled)
- Expect to align detailed activities within GDE context over next few months
  - We have flexibility – but are contractually obliged to deliver!
- Mostly Accelerator Physics related R&D
  - No cost related ‘engineering’ foreseen