

QUESTIONNAIRE ABOUT FPC DEVELOPMENT FOR HEP

09/22/23, F. Gerigk, E. Montesinos, A.
Neumann

FPC
subtopic

First answers...

- Basically contacted all participants of WWFPC meeting, which usually takes place every year at CERN to bring together fundamental power coupler experts → not this year ☹️
- Used the list of questions developed by Giovanni and Peter

CERN	Eric Montesinos	✓
DESY	Denis Kostin	✓
KEK	Yasuchika Yamamoto	
RIKEN	Kazutaka Ozeki	
IHEP	Tong ming Huang	
LAL	Walid Kaabi	
IPNO	Emmanuel Rampoux	
BNL	Wencan Xu	
IBS	Ilkyoung Shin	
CEA	Guillaume Devanz	
Cornell	Vadim Veshcherevich	
JLAB	Mircea Stribet	
ORNL	Yoon Kang	
FNAL	Sergey Kazakov	
SLAC	Chris Adolphsen	
HZB	Emmy Sharples	✓
IMP-CAS	Tiancan Jiang	



First findings...very preliminary

- FPC development seems mainly to be project driven and the main research direction the laboratory is involved in. There is no real generic FPC development on-going.
- Any FPC system is adapted to its project requirements, cavity and module layout plus assembly strategy
- There is an interest by the experts of the labs to continue in FPC development (for HEP), but this does not necessarily reflect the lab research directive
- Various labs have quite some infrastructure, as FPC+(S)RF cavity teststands, cleanroom facilities, mechanical workshops, material test facilities (microscopes, surface analysis), ovens, module teststands
- Funding is also mostly project based, there is only little funding for generic R&D
- Personnel from 1.5, 3 up to 5 FTE, which maybe also varies about the way, how people are counted
- This is only for 3 out of 17 labs, of which only 6 are located in Europe (is this a complete overview?)
- The labs involved are mainly from the HEP and also SRF community. Eventually expanding on lightsources would add more systems (even though often R&D is limited at those facilities)?