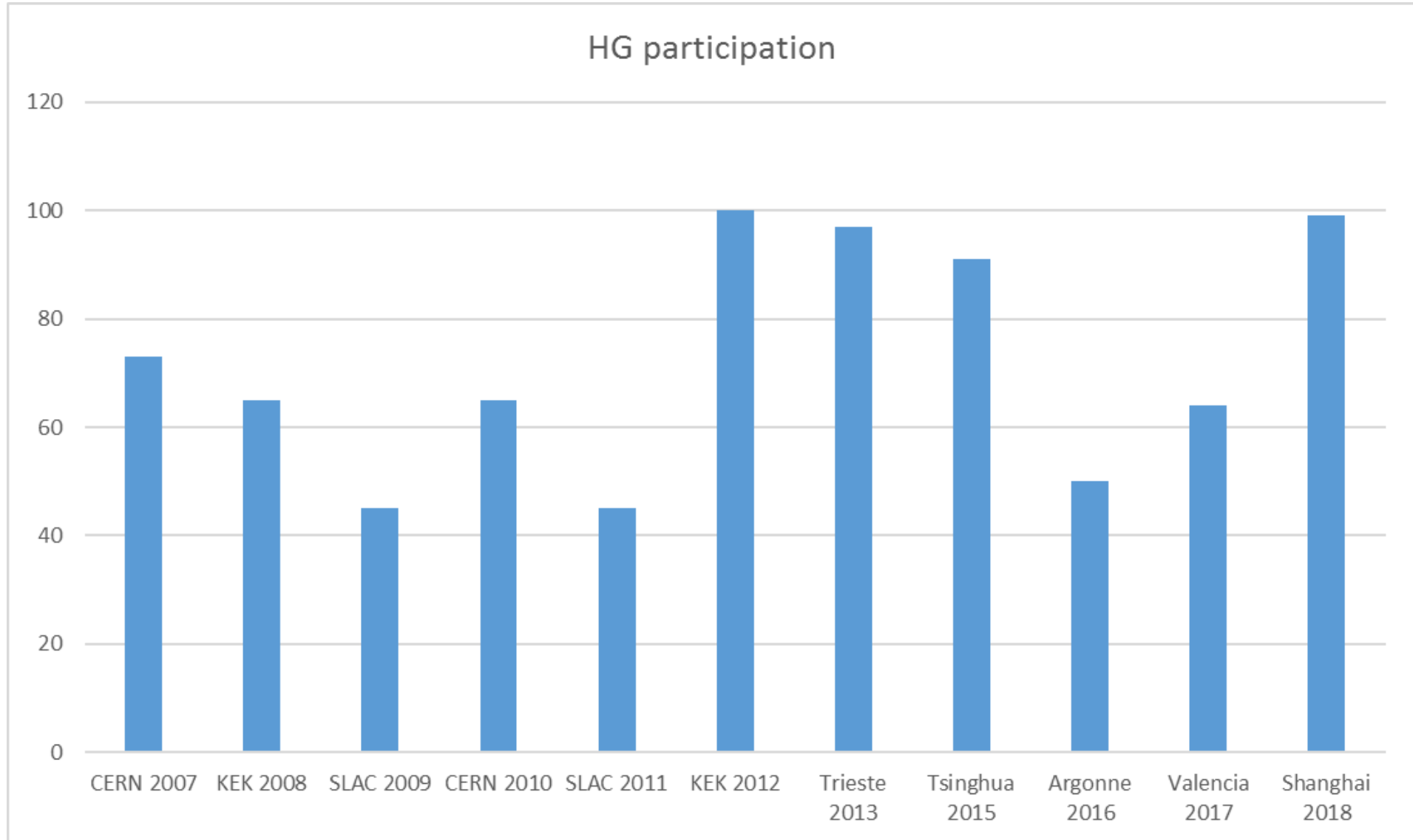




Closing Remarks to HG2018



A look back over the years





Conclusions



CLIC: Overview of applications using high-gradient acceleration, from photon sources to medical physics (5/5)

CERN academic training - Compact Linear Collider

Walter Wuensch,
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9 March 2016

CERN academic training - Compact Linear Collider

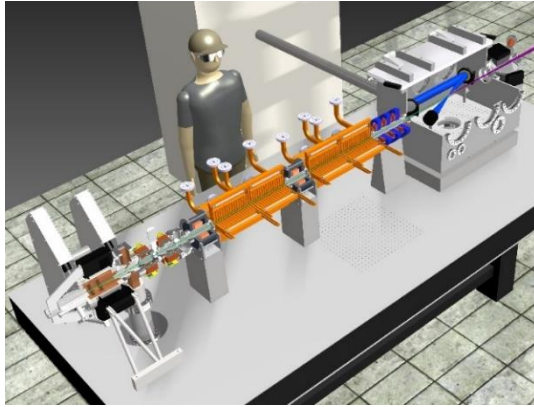
1

<https://indico.cern.ch/event/668151/>

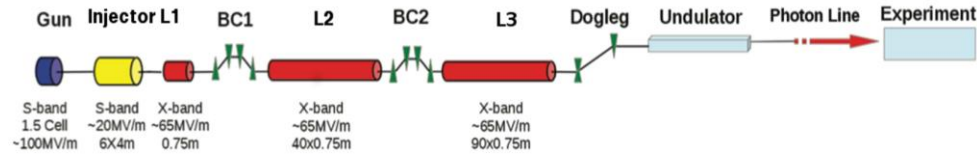
- Dynamic and growing community of high-gradient and X-band users.
- Initial period of growth driven by linear collider studies.
- Proliferation of smaller-scale applications, total level of activity now overtaking CLIC.
- We look forward to exciting and interesting times as the cross fertilization takes off.
- The benefit for CLIC has far exceeded the investment in helping other applications get started.



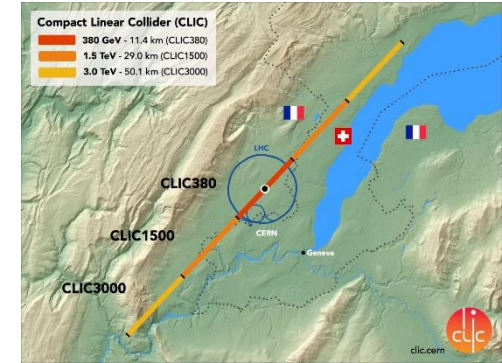
Applications overview



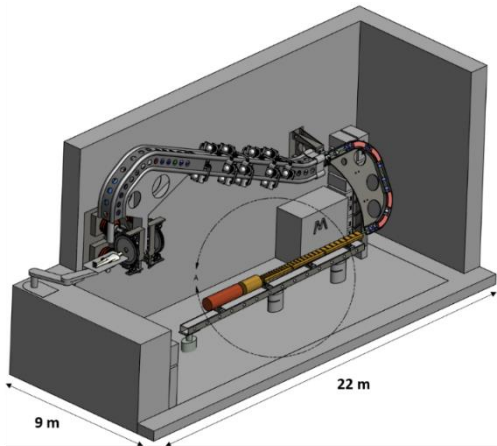
Inverse Compton Source



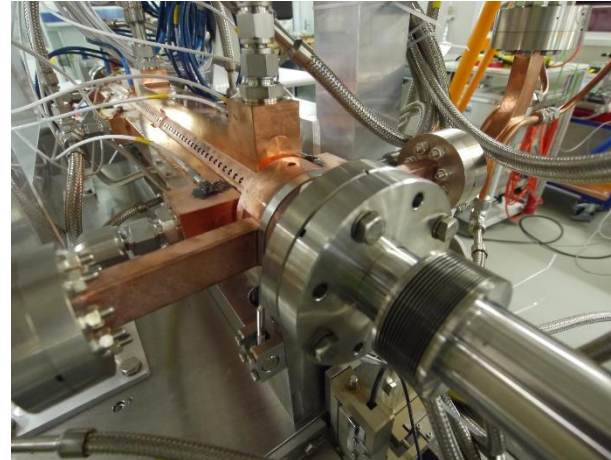
XFEL



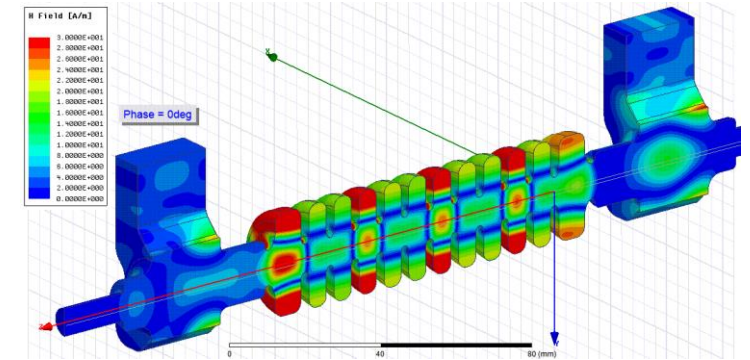
Linear collider



Medical applications



Energy spread linearizer



Deflector for short bunch diagnostics



High-gradient test infrastructure



CERN	XBox-1	50 MW, 12 GHz	Operational (later to CLEAR)
	Xbox-2	50 MW, 12 GHz	Operational
	XBox-3	4x6 MW, 12 GHz	Operational
KEK	NEXTEF	2x50 MW	Operational
Tsinghua	Later energy upgrade for Compton	50 MW, 12 GHz	Commissioning
Trieste	CTF	45 MW, 3 GHz	Operational
Valencia		2x10 MW, 3 GHz	Commissioning
Frascati		50 MW, 12 GHz	Procurement
Shanghai		50 MW, 12 GHz	Procurement
Melbourne, ALS		2x6 MW, 12 GHz	Proposal submission
SLAC	NLCTA		Operational (I think)



X-band linearizers and deflectors



Trieste	Linearizer for Fermi	50 MW	Operational
PSI	Linearizer for SwissFEL	50 MW	Operational
	Deflector for SwissFEL	50 MW	Design and procurement
DESY	Deflector for FLASHforward	6 MW	Design and procurement
	Deflector for FLASH2	6 MW	Design and procurement
	Deflector for Sinbad	tbd	Planning
SINAP	Linearizer for soft X-ray FEL	6 MW	Operational
	Deflectors for soft X-ray FEL	2x50 MW	Procurement
Daresbury	Linearizer	6 MW	Design and procurement
Tsinghua	Linearizer for Compton source	6 MW	Planning
SLAC	LCWS linearizer		Operational
	LCWS deflector	50 MW	Operational



X-band linacs



Eindhoven	Compact Compton source - 100 MeV	6 MW	Design and procurement
CERN	CLEAR – 50 MeV (from Xbox-1)	50 MW	Design and preparation
Frascati	XFEL, injector to plasma - 1 GeV	4(8)x50 MW	CDR
Collaboration	CompactLight – 6 GeV		Design Study
CERN	LDMX – 3.5 GeV	24x50 MW	Proposal under discussion
Groningen	1.4 GEV XFEL Accelerator - 1.4 GeV		NL roadmap
CERN	CLIC – 380 GeV	5000x50 MW	CDR

Please send me your corrections and additions! I will try to keep the list up to date.



HG2019

In Europe, details under discussion.



A deep and sincere thank You!

Participants

Speakers

Supporters

Local organizers – Wencheng, Xiaoxia and
colleagues