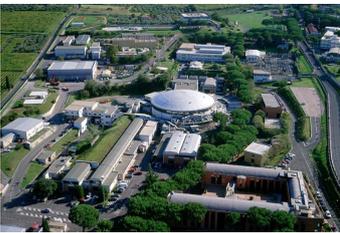


65th ICFA Advanced Beam Dynamics Workshop on High Luminosity Circular e⁺e⁻ Colliders eeFACT2022 September 12-15, 2022 INFN Frascati National Laboratories (Italy)

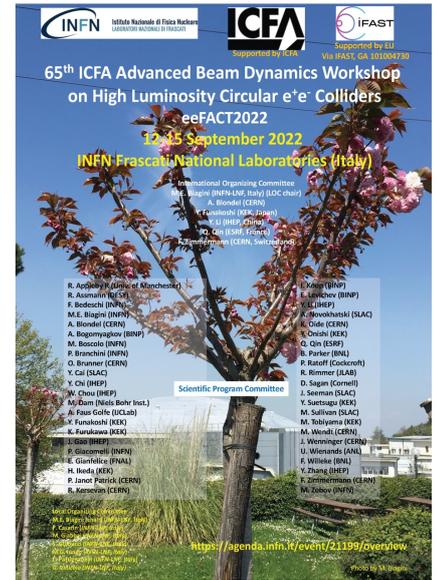


The INFN Frascati National Laboratories hosted the ICFA Advanced Beam Dynamics Workshop on High Luminosity Circular e⁺e⁻ Colliders (eeFACT2022). This workshop is organized in the context and with sponsoring of the ICFA Beam Dynamics Panel and EU/IFAST funded European Network for Accelerator Performance and Concepts (APEC). This is a biannual meeting, but we had to skip 2020 (and 2021) edition due to the covid-19 pandemic.

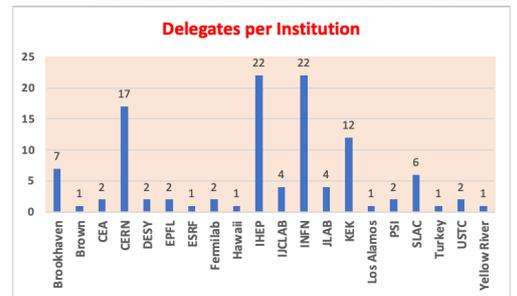
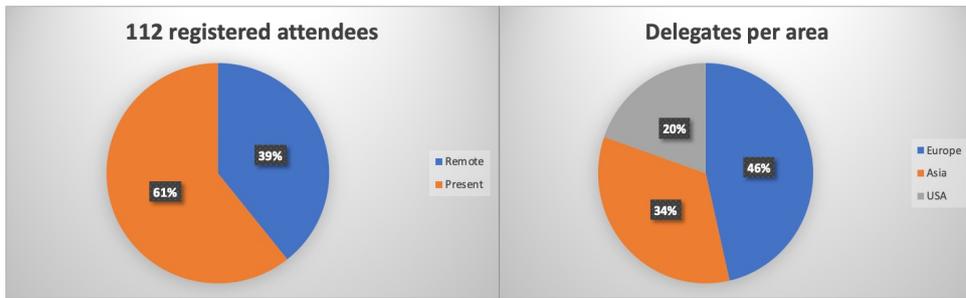
eeFACT2022 scope:

- Reviewing and documenting the state of the art in e⁺e⁻ factory design
- Reviewing and drawing lessons from SuperKEKB phase 3 commissioning
- Catalyzing further contributions to the SuperKEKB, FCC, CEPC & tau-charm design efforts
- Fostering synergies and new collaborations across communities, in particular with low-emittance light sources and other colliders (muon, linear, e-ion) and between continents
- Jointly developing novel solutions to outstanding problems

Website: <https://agenda.infn.it/event/21199/overview>



**Hybrid format Workshop: in person & remote, 112 delegates
105 talks (including the EXTRA sessions)**



Topics were divided in 13 Working Groups, each assigned to 2 conveners, and the program built accordingly

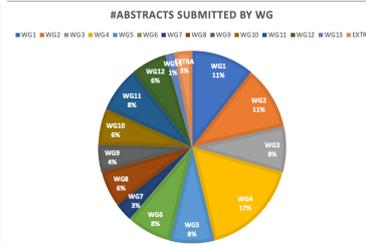
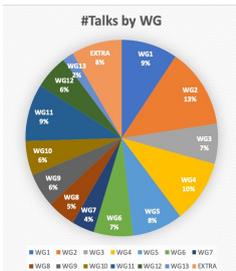
WG1	Levichev/Biagini	Overview of colliders (including muon & e-ion colliders)
WG2	Branchini/Dam	Physics & Detector
WG3	Oide/Gao	Optics & Beam Dynamics
WG4	Zobov/Zimmermann	Beam-beam & Instabilities
WG5	Boscolo/Sullivan	Interaction Region & MDI & Backgrounds
WG6	Seeman/Furukawa	Injection
WG7	Ikeda/Wendt	Instrumentation
WG8	Bogomyagkov/Gianfelice	Polarization and energy calibration
WG9	Kersevan/Shibata	Vacuum
WG10	Parker/Koop/Li	Magnets
WG11	Brunner/Rimmer	RF
WG12	Qin/Funakoshi	Infrastructures, Cryogenics, Commissioning & Operation
WG13	Faus-Golfe/Wenninger	Monochromatization

Two EXTRA sessions were organized after the Workshop, to address "Luminosity and Electrical power projections for various e⁺e⁻ Factories"

Thursday, 15 September	Friday, 16 September
<p>Power Bell conveners</p> <p>Speaker: Vladimir Shiltsev (CERN)</p> <p>10:30 C13.1</p> <p>Speaker: Emilio Navari (DESY)</p> <p>10:30 CEPC and BNL</p> <p>Speaker: Franck Zimmermann (CEPC)</p> <p>10:30 HELIX</p> <p>Speaker: Sergio Belmonte (DESY)</p> <p>10:30 EC</p> <p>Speaker: Todd Boteggs (DESY)</p>	<p>FCCE</p> <p>Speaker: Franck Zimmermann (CEPC)</p> <p>10:30 CEPC</p> <p>Speaker: Jie Gao (DESY)</p> <p>10:30 CLIC</p> <p>Speaker: Stefan Stupakov (DESY)</p> <p>10:30 ILC</p> <p>Speaker: Benno List (DESY)</p>

Statistics of abstracts and papers submitted by WG as of October 27th, deadline is November 30th
(Note: EXTRA talks were not asked to submit a paper)

WG	# Talks	# Abstracts	# Papers	%
WG1	10	7	2	70
WG2	13	7		53
WG3	7	5		71
WG4	11	11	1	100
WG5	9	5		55
WG6	7	5	1	71
WG7	4	2		50
WG8	5	4		80
WG9	6	3		50
WG10	6	4		66
WG11	10	5		50
WG12	6	4	2	66
WG13	2	1		50
EXTRA	9	2		22
TOTAL	105	65	6	



Group photo



Welcome cocktail



Social dinner (with a view!)