

Elettra Sincrotrone Trieste



POwer Converters for Particle Accelerators

In-Person! 2018 – 2023: Back to the Future!

Roberto Visintini Elettra Sincrotrone Trieste

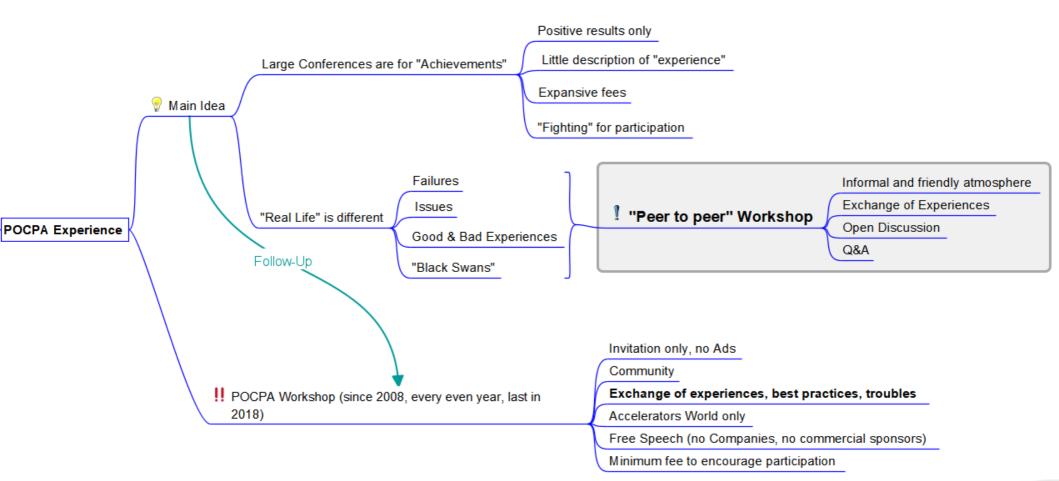


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The idea behind the workshop...

It should be known but we always have so many "First-Timers"...

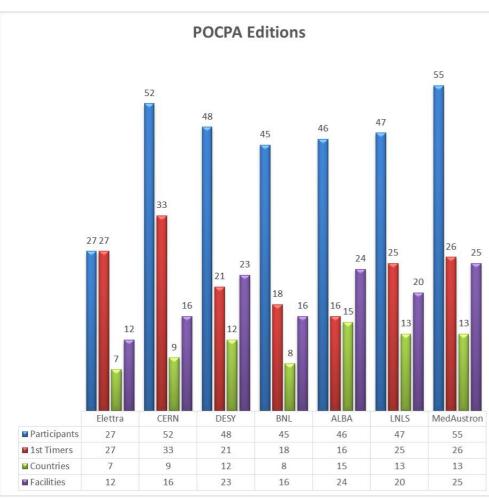




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POCPA Community



Editio	n Year	Host Lab	Participants	1st Timers	% of 1stT	Countries	Facilities
	1 2008	Elettra	27	27	100%	7	12
	2 2010	CERN	52	33	63%	9	16
	3 2012	DESY	48	21	44%	12	23
	4 2014	BNL	45	18	40%	8	16
	5 2016	6 ALBA	46	16	35%	15	24
	5 2018	LNLS	47	25	53%	13	20
	7 2023	MedAustron	55	26	47%	13	25
Av	erage (exl. POCPA1)	49	24	48%	12	21

- Website and mailing list managed by CERN
- ✓ ~140 registered specialists
- ✓ ~38 Facilities worldwide
- ✓ 21 Countries
- ✓ 4 Continents (all besides Africa)

(Data from POCPA website)





Previous editions

- ✓ <u>POCPA1</u> 2008 (Elettra) on "Reliability"
- ✓ <u>POCPA2</u> 2010 (CERN) on "Safety"
- ✓ <u>POCPA3</u> 2012 (DESY) on "Digital Regulation and Control", with tutorials
- ✓ <u>POCPA4</u> 2014 (BNL) on "Maintenance, best strategies and practices"
- ✓ <u>POCPA5</u> 2016 (ALBA) on "Performance Specification, Reviewing and Testing for Power supplies and Subsystems"
- ✓ <u>POCPA6</u> 2018 (LNLS) on "Efficiency and integration with other systems"



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POCPA7 Main Topic

- ⇒ New Accelerators design and upgrade require ~1000 or more power converters
- \Rightarrow MTBF >10⁵ or 10⁶ hour

"Reliability & Components Ageing"



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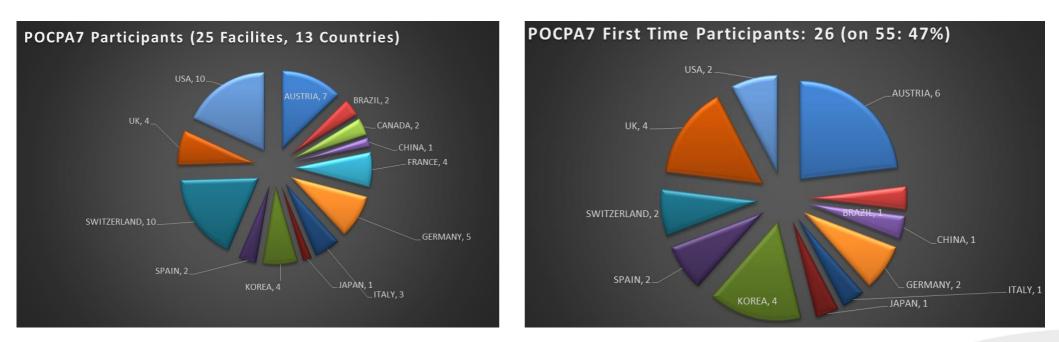
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POCPA7 - Numbers

- \Rightarrow 55 Specialists (7 "internal"), 26 "1st-timers" (47%)
- \Rightarrow **25** Facilities worldwide
- \Rightarrow 13 Countries from 3 Continents

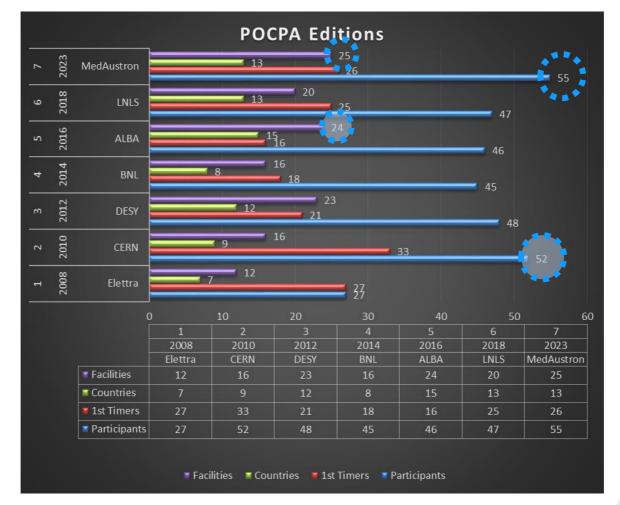






POCPA7 – Records

⇒ 55 Specialists (Previous: 52, POCPA2 at CERN) ⇒ 25 Facilities worldwide (Previous: 24, POCPA5 at ALBA)





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Where we left off...



Thank you MedAustron! Enjoy POCPA7!



LINEEN ISO 9001:2014

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Thank you!



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