



Channeling 2016

A welcome from INFN

Fernando Ferroni

Sapienza University & INFN

Sirmione 25 September 2016

Channelling is:

- integral part of INFN scientific history

Giordano Diambri Palazzi

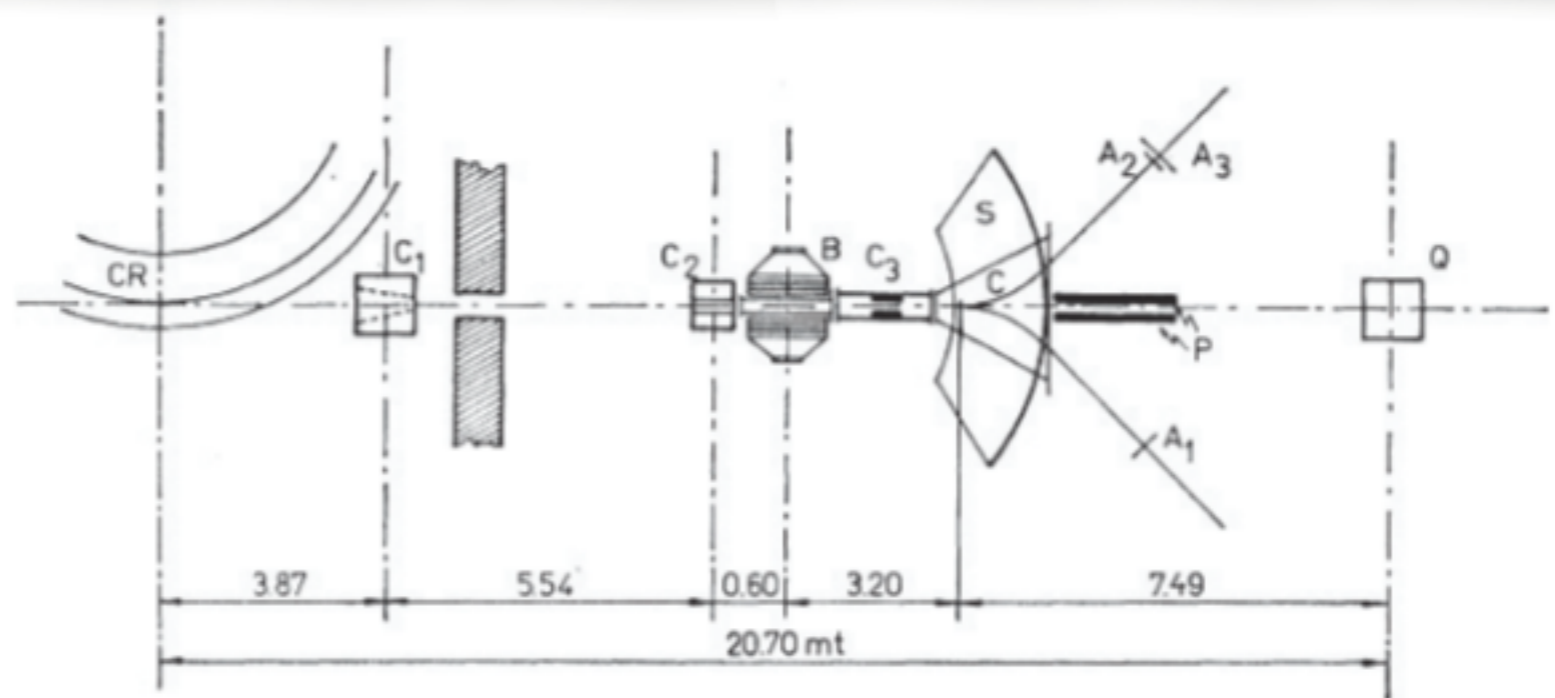
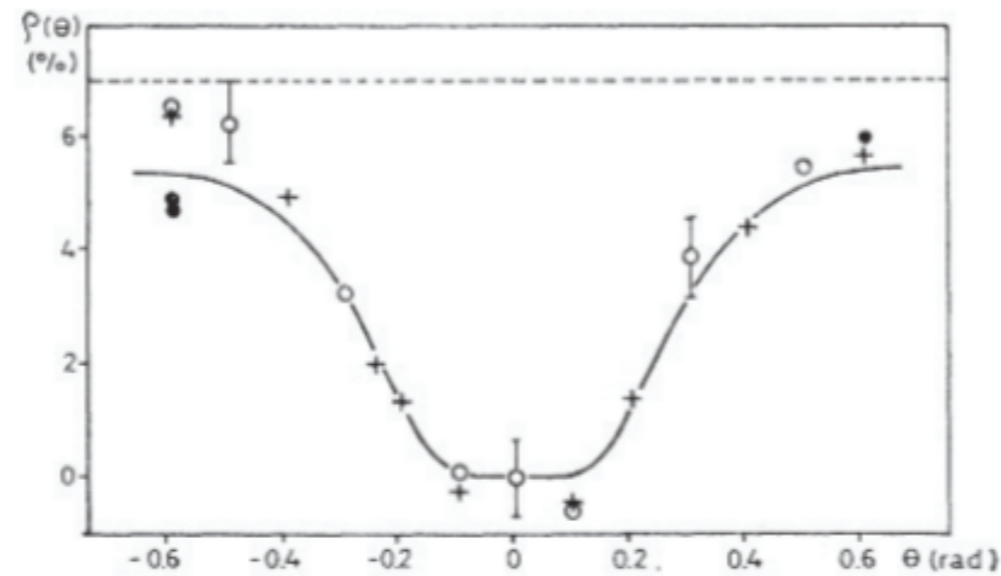


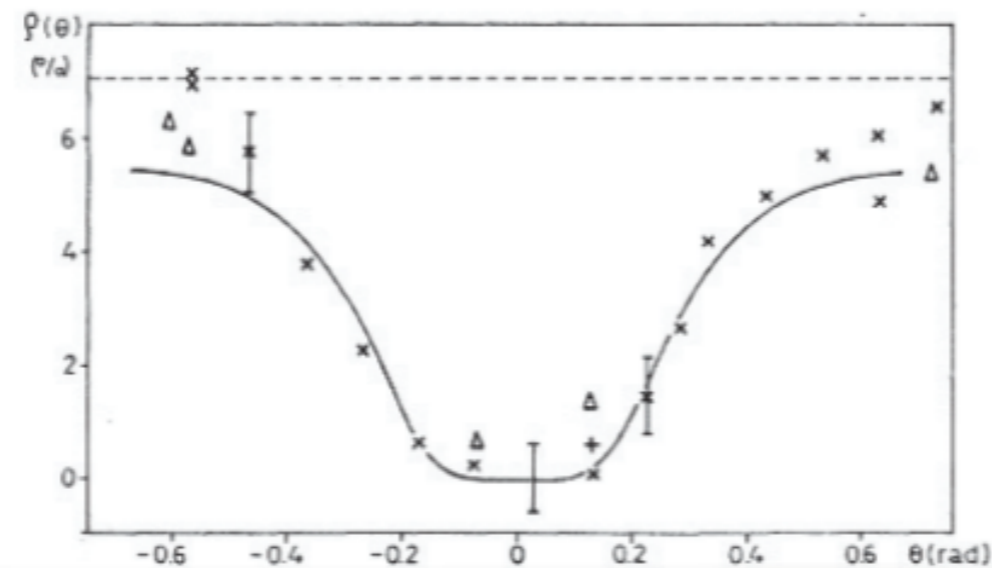
Figure 2: Experimental setup used by the Frascati group for measuring the coherent bremsstrahlung and electron pair production [6].

remarkable result

The results are good and in agreement with the theory, showing the expected central minimum (see Fig.3); they are published in a noteworthy series of papers on the Physical Review Letters journal [5].



a



- [5] G. Bologna, G. Diambri Palazzi, G. P. Murtas, Phys. Rev. Lett. 4 (1960) 134; Phys. Rev. Lett. 4 (1960) 572.

a personal note



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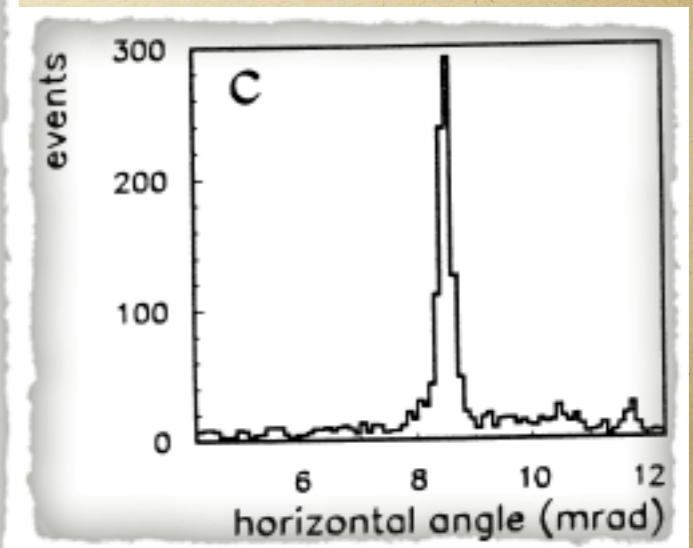
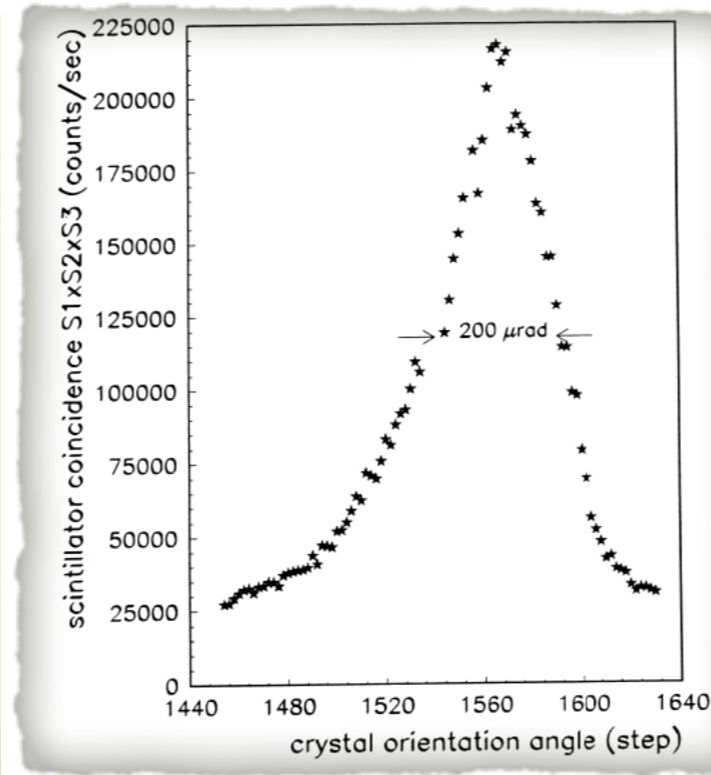
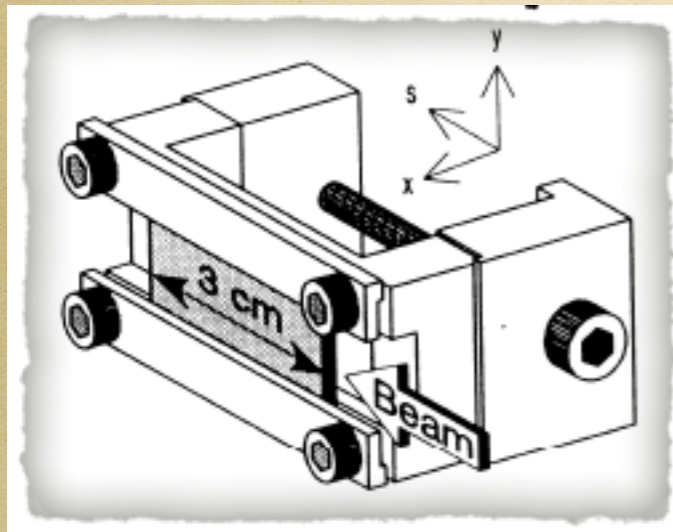
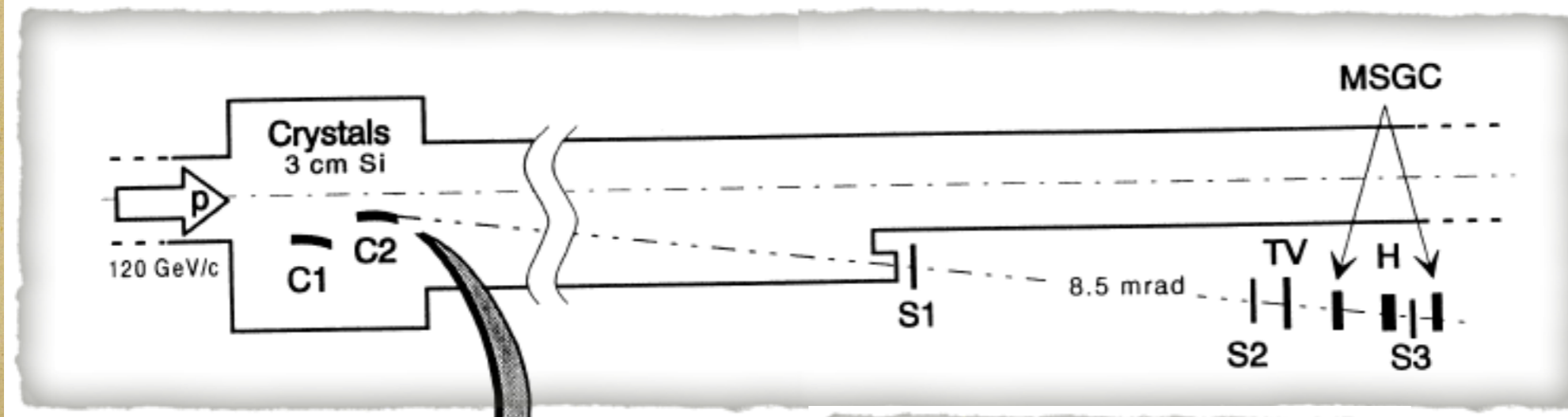


First results on proton extraction from the CERN-SPS with a bent crystal

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from SPS

	crystal 1	crystal 2
intensity of circulating beam	$(7.0 \pm 0.1) \cdot 10^{11}$	$(3.7 \pm 0.1) \cdot 10^{11}$
beam lifetime (hours)	29 ± 2	12 ± 1
protons lost per second	$(6.7 \pm 0.5) \cdot 10^6$	$(8.9 \pm 0.7) \cdot 10^6$
protons detected per second	$5.6 \cdot 10^5$	$6.6 \cdot 10^5$
background (%)	5	2
detection efficiency after cuts (%)	78 ± 12	78 ± 12
extraction efficiency (%)	10.2 ± 1.7	9.3 ± 1.6



to LHC

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Physics Letters B

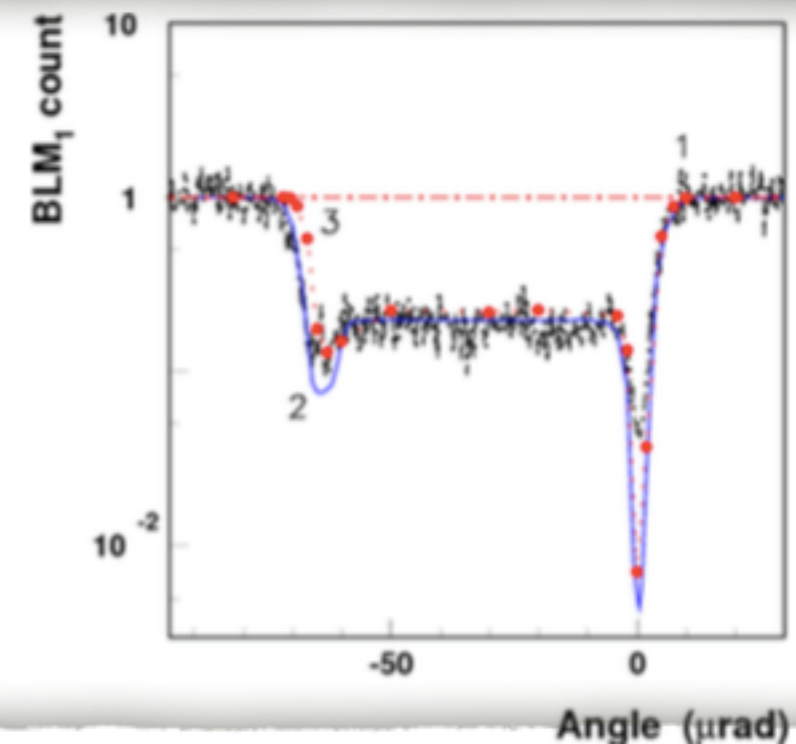
www.elsevier.com/locate/physletb



Observation of channeling for 6500 GeV/c protons in the crystal assisted collimation setup for LHC



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SO.....

➤ best wishes for a productive week of work on this important subject (in this very nice location)