

Celebrating 50 yrs of Hadron Colliders (since Jan. 1971)

Sebastian White & Paola Catapano

Heritage Committee mtg. Sept. 23, '19

Much has been written about ISR
accelerator inventions-> stacking, cooling, low-Beta, hi-vacuum, ...
=> impacting future accelerators
also

Consciousness raising about potential ("energy frontier"-Weisskopf) & Detector design
=> today's suite of LHC experiments

see eg.

Hoddeson's "The Rise of Colliding Beams"

Gillies' book review in current CERN Courier

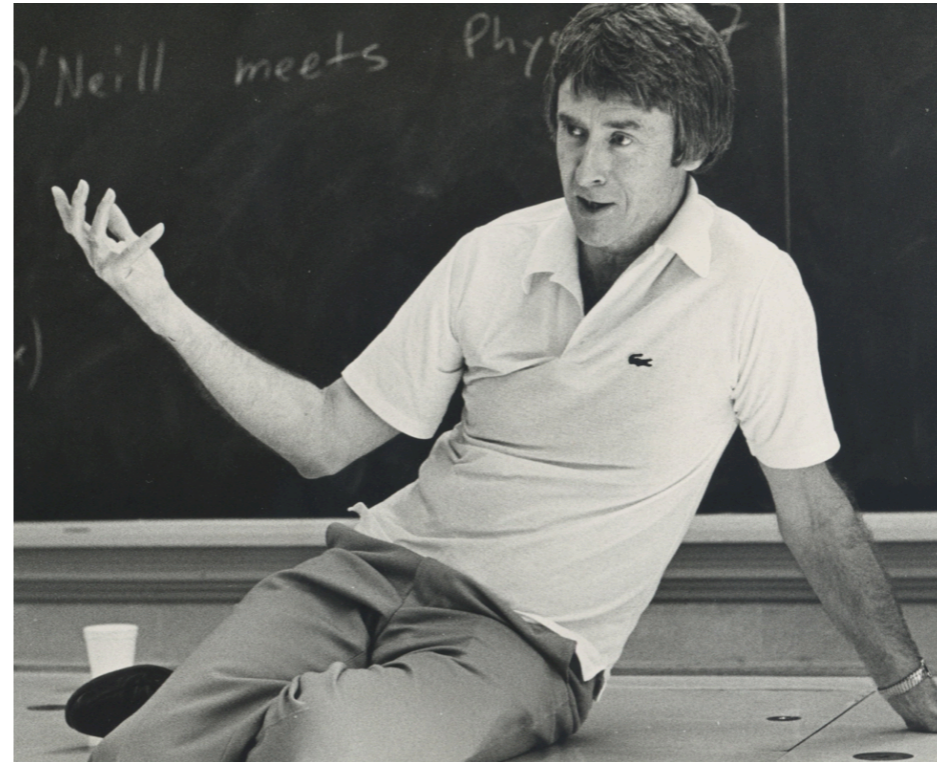
&collections on Physics and technology
eg. "Technology meets Research", Taylor et al

ORGANISATION EUROPÉENNE POUR LA RECHERCHE NUCLÉAIRE
CERN EUROPEAN ORGANIZATION FOR NUCLEAR RESEARCH

Amaldi et al. , Jan. 2011

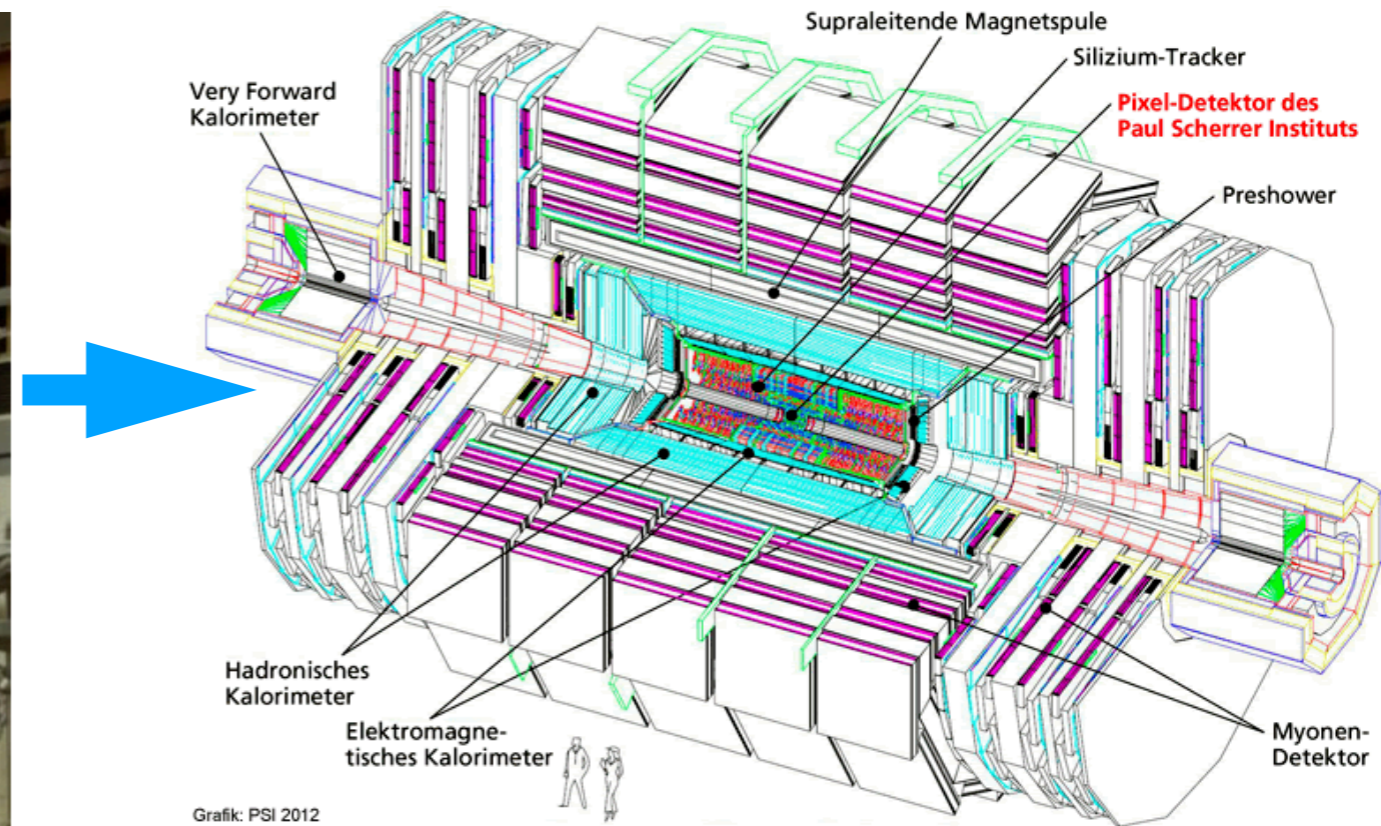
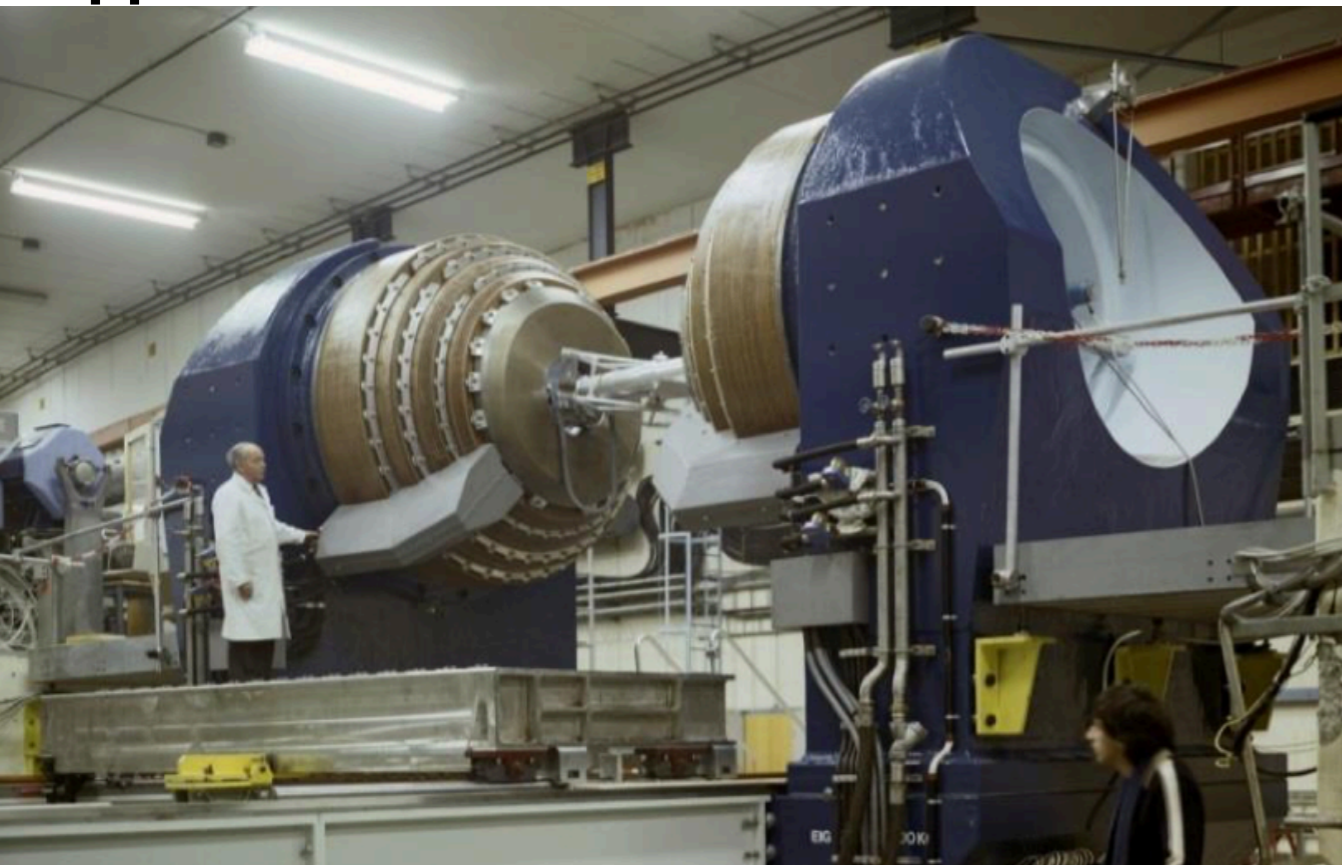
**40th Anniversary of the First Proton-Proton Collisions
in the CERN Intersecting Storage Rings (ISR)**

Also Interesting Prehistory



<http://gerardoneillthefilm.com>

approach to detectors: "we must access"



how to complement this for non-technical audience?

what does “collider” mean to the public?

It's worth remembering every now and then that Trump is *horrible* at being president. The basic tasks are as far beyond him as it would be for a parakeet attempting to operate the Large Hadron Collider. [NYTimes](#)

both the Machine and the Science-eg “Higgs Field” or even “Field”- are seen as deep and mysterious.

-> harder to convey than Ira Flatow’s excellent “Transistorized”-PBS 1999

Bell Labs —> CERN

..but we all understand importance of transistors

Nevertheless “Large Hadron Collider” & “Higgs” of wide public interest

This Project

- we are collecting personal accounts from a 50 yr. story
- avoid “talking heads” format
- a story which could provide useful resource for “oral history”, etc

Oral History examples:(this is not one)

- **Rockefeller U.:** (www.rockefeller.edu/about/history)
(by outside professional- Leyla Vural)
- **Fermilab:** (<https://history.fnal.gov>)
(internal “history and archives project”)
- **Brookhaven:** (www.bnl.gov/about/history/)
role of neighbors-> AIP, Stony Brook
(I also did a collection of interviews for the Goldhaber family)

(CERN: discussed at last heritage mtg.)

The Project so far:

- ~40 min interviews with DiLella, Virdee, Nakada, Caspers, Dremin
- earlier related interviews done over past 10 years: Jack Steinberger, Dick Garwin, TD Lee, Freeman Dyson, Maurice Goldhaber, Alfred Goldhaber, Murray Gell-Mann, Willis Lamb, etc.
- helpful suggestions for further from Tom Taylor, Ugo Amaldi, John Peoples, Chris Quigg, etc.

Timeline:

**will collect rest of story over next ~ 6 months
also producing written transcripts
=> resource for CERN Courier excerpts, etc.**

**endorsement from this committee would be helpful for justifying
small operating expenses**

backup: “credentials”

- Paola- Head of CERN AV Production+ RAI +++++

- SNW
 - participated in all 5 Hadron Colliders (CCRS@ISR-thesis,UA6@SppS,CDF@Tevatron,PHENIX@RHIC,ATLAS/CMS@LHC)
 - exec producer-“CERN-Why We Do What We Do” (2015)
 - Opinion writer on Science foxnews.com
 - TESLA/Wardenclyffe Project advisor+ “Tower to the People”+Discovery channel
 - lectures on above- Centro Nacional de Las Artes, Mexico; British “Lumiere Festival”, etc.