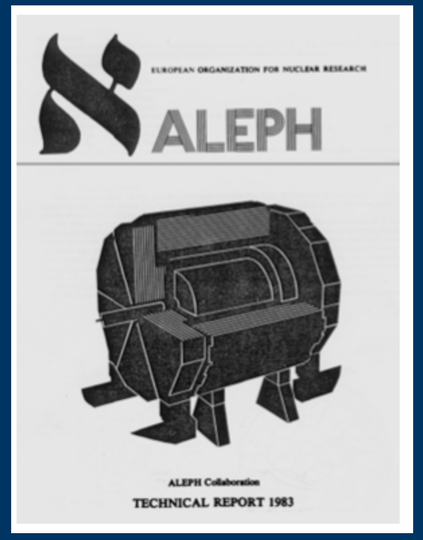
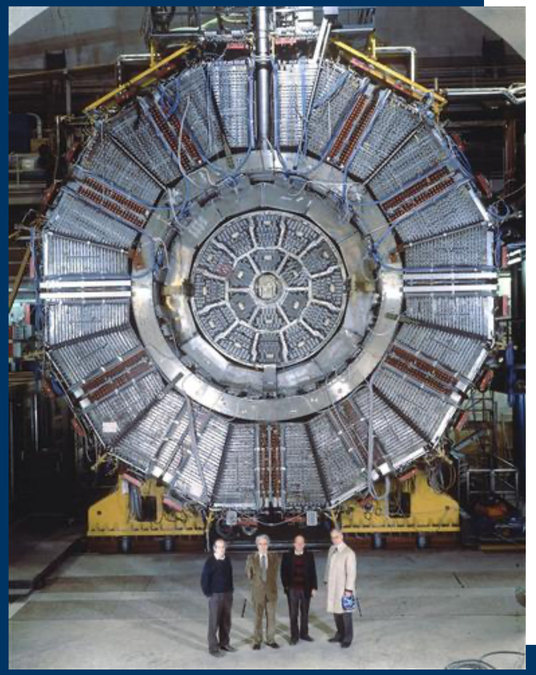
HEP2022

39th Συνάντηση ΕΕΣΦΥΕ
Τιμητική εκδήλωση για
Άννα Βαγιάκη και Εριέττα Σιμοπούλου

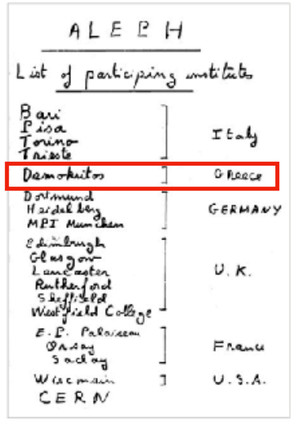
I. Efthymiopoulos - 16.06.2022





1982–1983

THE LETTER OF INTENT



Recommendation by the LEPC

Following the letter of intent in March 1982 (on the left is the first transparency of Jacques' presentation to the LEPC), Aleph was recommended by the LEPC at its meeting on 16 November 1982 (see the DG's letter opposite).

The LEPC required a technical report to be produced by 25 April 1983 where a number of technical and financial issues had to be addressed and specified the following:

Milestones:

- TPC: a prototype of at least a 1.5 m long drift length, with magnetic field (later known as TPC 90);
- **Shower counter:** a prototype should be built with a mini tower geometry, large enough to contain a full shower of ≤ 10 GeV energy. It should be tested in a magnetic field and the energy and spatial resolution determined. And a prototype of a full size barrel section should be built and tested.

Staging:

At the turn on, the magnet, the TPC, the shower counter and one layer of 11 HCAL chambers should be ready. Monte Carlo simulations were also requested.

Interesting remark:

ALEPH, OPAL and DELPHI were recommended (and ELECTRA and LOGIC not); 'if four experiments were to be approved, L3 would be considered as a candidate for the fourth experiment'.

Approval by the Research Board

In reality the final approval was given only in June 1983, after publication of the technical report (see next article below).

1. Milestones: as recommended by the LEPC (see above).
2. The DG decides that in view of the amount of money involved, written commitments must be done by the bodies responsible for financing giving the maximum of guarantee that they will fulfil their commitments.

(NB: Later it turned out to be incredibly difficult for CERN to respect its commitments than the other participants!)

This LOI was followed in May 1983 by a memo from the Collaboration to E. Gabathuler in connection with the choice of the experimental area, 4 or 8, foreseen for Aleph or Delphi. (The choice of 2 in 12 and 6 for Opal was dictated by the electrical power possibilities for Opal and necessity for cost reason for L3 to be as close as possible to the surface.) In this memo a general planning was shown where Aleph would be ready for live tests by the end of April 1987 and that zone 8 should therefore go to Aleph. The argument for the experimental zone 8 was the fact that, in the LEP civil engineering planning, zone 4 was supposed to be ready 10 months later than zone 8 and therefore the installation and commissioning of the detector would be too late for the start up of LEP (foreseen in early 1989 at that time). The closest to truth is the guess for assembly in 18 months, as it took about 21, the rest was Dichtung und Wahrheit.

(Editor's note-It's as everyone knows, in the end Aleph got pit 4: see CHOICE OF EXPERIMENTAL ZONE by Pierre Lazeyras below—which turned out to be the best.)

12

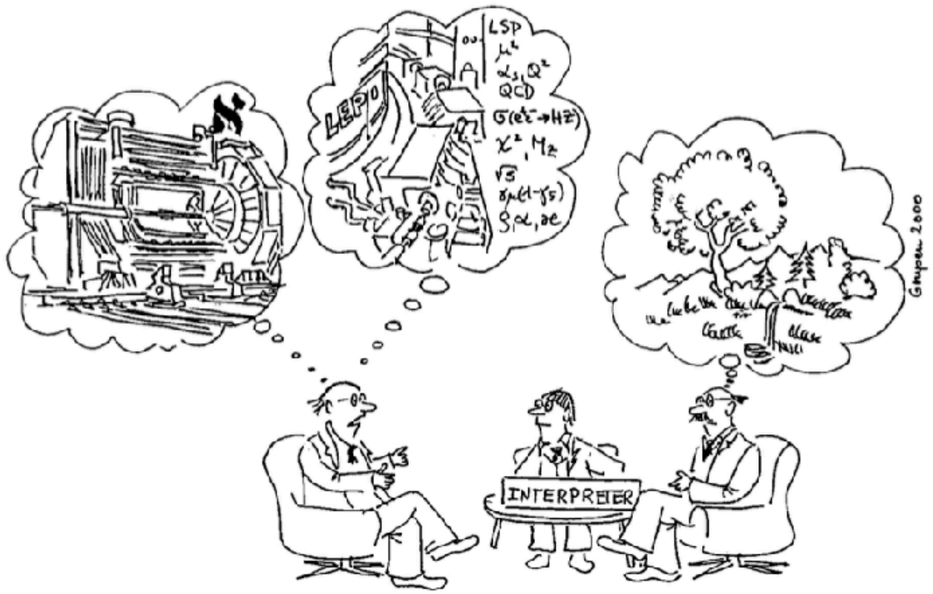
The 'young' Aleph Collaboration in 1986.

'Experiment is the interpreter of nature. Experiments never deceive. It is our judgment that sometimes deceives itself, because it expects results that experiment refuses. We must consult experiment, varying the circumstances, until we have deduced general rules, for experiment alone can furnish reliable rules.'

LEONARDO DA VINCI

Σελίδες και φωτογραφίες απο την εκδοση "The ALEPH Experience, 25 years of ALEPH Memories", ISBN 9290832339, Editor: R. Settles et al.

ALEPH Weeks Outside CERN



An ALEPH expert explains the Higgs evidence to a layman
(Editor's note-CG: after Vladimir Rencin…)

Σελίδες και φωτογραφίες απο την εκδοση "The ALEPH Experience, 25 years of ALEPH Memories", ISBN 9290832339, Editor: R. Settles et al.

1989

ATHENS '89

Anna Vayaki

Way back when we were young, and before shifts and shift leaders became a focal point of Aleph, back in May of 1989, there was an Aleph Week in Athens. Well, actually in a suburb of Athens, called Vouliagmeni, as those of you who participated must recall.

At first there was trepidation, all the puritans in Aleph thought it was really indulging the flesh to come and spend a week by the sea, trying to work, when the first data run had not yet happened. The result proved them wrong, as work was carried out, in a funny schedule to be sure, with a long midday break so people could go swimming on the lovely beaches, and evening sessions to get the work done.

The climax of the meeting was at the Aleph dinner, in a taverna in Vari, when we all whooshed over and sat on the floor in front of the single TV, to watch Jack Steinberger being interviewed for the evening news.

(Editor's note-JL: Jack, of course, had recently been made a Physics Nobel Laureate (along with Leon Lederman and Melvin Schwartz).)

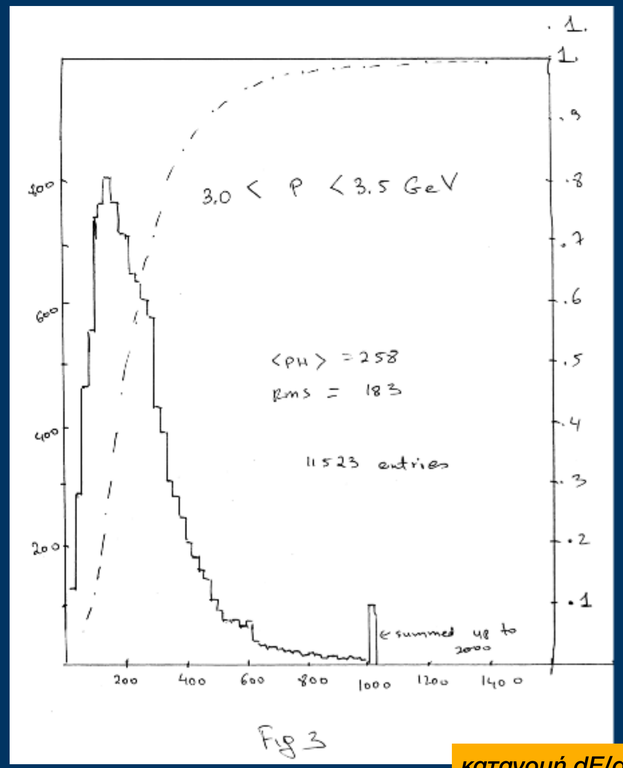
(Editor's note-RS: These words give an impression of calmness, but actually the situation was rather tense: the detector was just starting, the DAQ was not working yet, and several people stayed in CERN getting ready for the pilot run. There were heated words exchanged (too racy to repeat here) between Jack Steinberger and Alain Blondel on the best way to analyse the first data.)

ALEPH 86-39
A. Vayaki
27.3.1986
Distr.: TPC

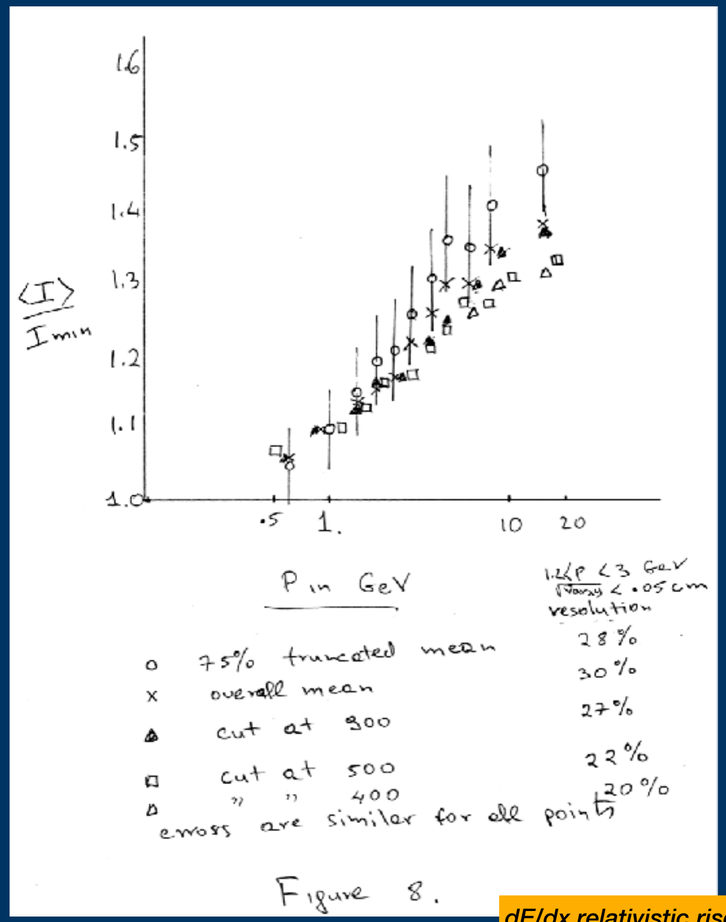
A Measurement of dE/dx in TPC90.11

A. Vayaki

Two cosmic ray runs of about 8000 events each in a magnetic field of ± 7 KGauss are analyzed. 204 pads in the seven rows and 52 of the wires were equipped with Berkeley electronics. From the Landau distribution of the wire pulses an average ionization per track by the truncated mean method , gives the expected ionization rise with momentum. The resolution in estimating the most probable energy loss from the Landau distributions with the truncated mean method, varies between 35% and 27% full width half maximum of the average ionization depending on progressive momentum resolution improvement cuts. The above observations are consistent with the expectations for the proposed ALEPH TPC, within the limited dimensions of the prototype.



κατανομή dE/dx



dE/dx relativistic rise

ALEPH

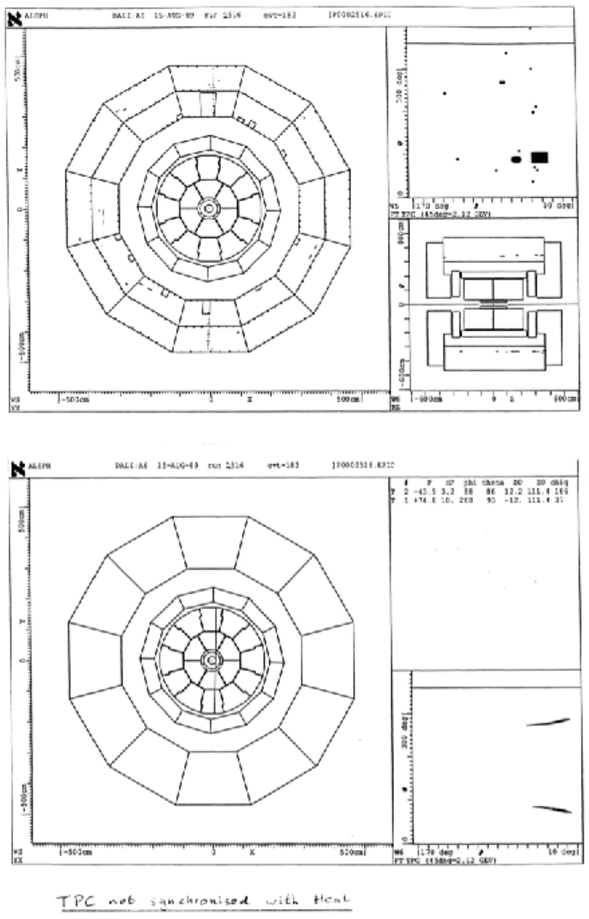
ALEPH 89-148
NOTE 89-9
H. Drevermann et al.
12 September 1989

EVENT SCANNING FOR THE 1989 PILOT RUN

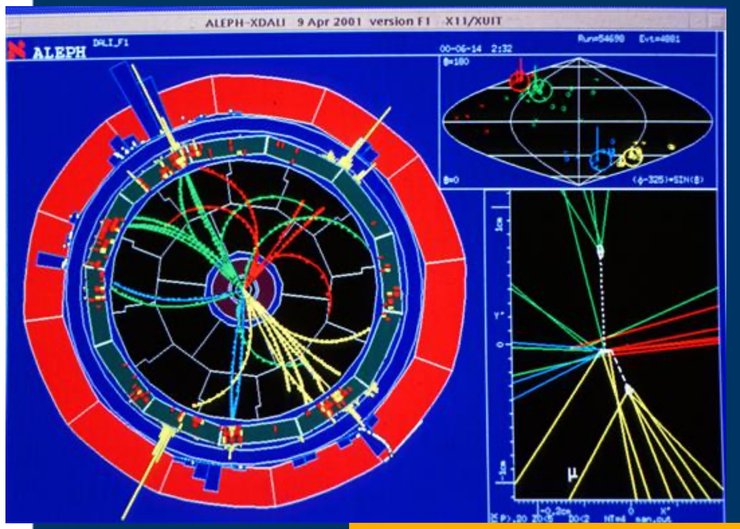
Hans Drevermann, Christoph Grab, Stephen Haywood, Errietta Simopoulou
Paul Colas, Mark Dinsdale, Chris Georgiopoulos, Andrew Halley, John Hilgart, Mike Mermikides,
Frederic Perrier, Stephen Snow, Mosadek Talby, Ingrid TenHave, Werner Wiedenmann

In this note, we summarise what we learnt about event scanning during the 1989 Pilot Run. With this in mind, we give our proposals for scanning events from the Autumn Physics Run.

Flexibility is the name of the game, and therefore we would encourage anyone with suggestions to make them known to us. In particular, we would welcome closer involvement with individual detectors to know what feedback we can provide and to whom we should address our problems or observations.



Ένα από τα αρχικά γεγονότα στο πείραμα,
δείχνει πρόβλημα συγχρονισμού ανάμεσα στους ανιχνευτές



γεγονός σύγκρουσης στον ανιχνευτή

EUROPEAN ORGANIZATION FOR NUCLEAR RESEARCH

CERN-EP/89-132
October 13th,1989

Determination of the Number of Light Neutrino Species

12 October 1989

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1980–2003

A POEM

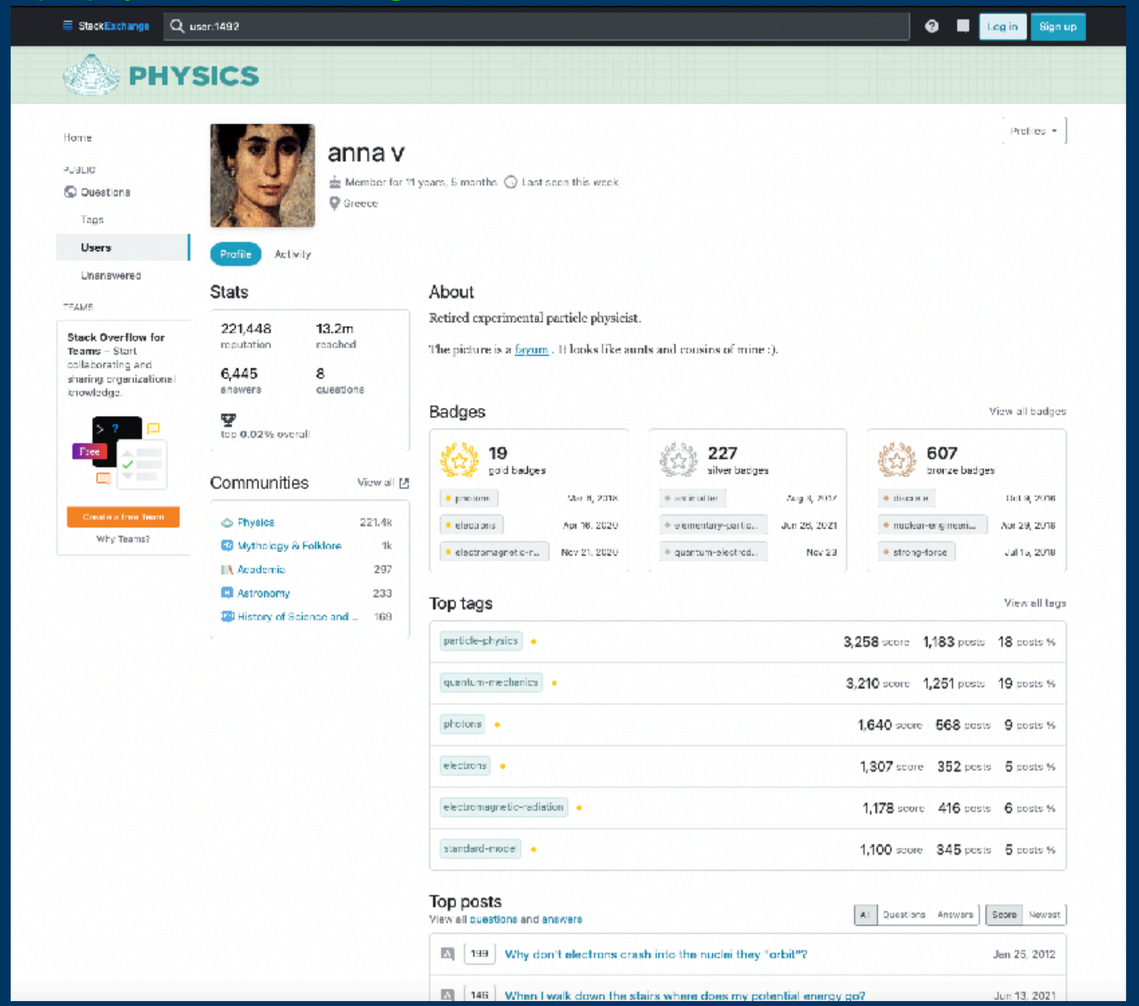
Anna Vayaki

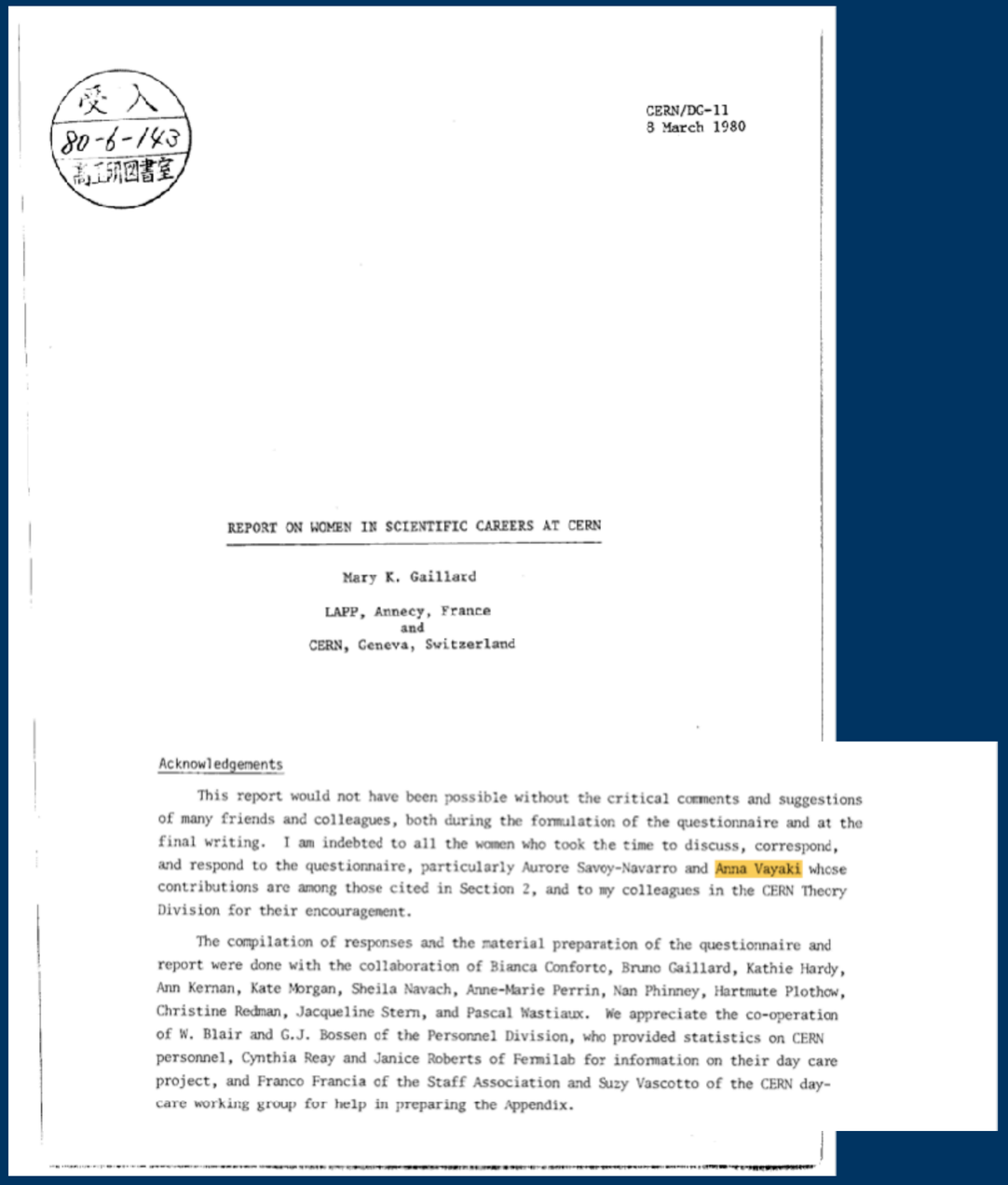
ALEPH

It had to start with 'A'
for a prime mover
and great expectations.
Slowly and laboriously,
built in many labs,
it grew
almost as if it were
a biological organism,
needing nursing,
tender loving care
and long nights of vigils
in underground haunted halls,
where sometimes bagpipes
resounded weirdly,
and magnetic fields
played havoc with displays.
A grand masterpiece,
a Stradivarius of detectors,
it played the tunes in bytes and bits,
morphing to lovely images,
obsessed by the search
for the melody of melodies
that in the end
tantalized us all.
Caretakers and scholars,
we observed
the perfect manifestation
of nature in microcosm,
lured continually onwards
by hopes and glimpses
of the newest ever theories.
Now the song is sung
and the last chords
die out,
Aleph
just a memory
but recorded well.

Απο την εκδοση "The ALEPH Experience, 25 years of ALEPH Memories", ISBN 9290832339, Editor: R. Settles et al

http://physics.stackexchange.com/





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80-6-143
高エ研図書室

CERN/DC-11
8 March 1980

REPORT ON WOMEN IN SCIENTIFIC CAREERS AT CERN

Mary K. Gaillard

LAPP, Annecy, France
and
CERN, Geneva, Switzerland

Acknowledgements

This report would not have been possible without the critical comments and suggestions of many friends and colleagues, both during the formulation of the questionnaire and at the final writing. I am indebted to all the women who took the time to discuss, correspond, and respond to the questionnaire, particularly Aurore Savoy-Navarro and Anna Vayaki whose contributions are among those cited in Section 2, and to my colleagues in the CERN Theory Division for their encouragement.

The compilation of responses and the material preparation of the questionnaire and report were done with the collaboration of Bianca Conforto, Bruno Gaillard, Kathie Hardy, Ann Kernan, Kate Morgan, Sheila Navach, Anne-Marie Perrin, Nan Phinney, Hartmute Plothow, Christine Redman, Jacqueline Stern, and Pascal Wastiaux. We appreciate the co-operation of W. Blair and G.J. Bossen of the Personnel Division, who provided statistics on CERN personnel, Cynthia Reay and Janice Roberts of Fermilab for information on their day care project, and Franco Francia of the Staff Association and Suzy Vascotto of the CERN day-care working group for help in preparing the Appendix.

Αγαπητή Άννα
ένα μεγάλο ευχαριστώ!

"I do not teach my students,

I only provide them with the conditions in which they can learn."

Albert Einstein.