

UNIVERSITY OF MARYLAND

Institute for Physical Science and Technology College Park, Maryland 20742

7-1: (301) 454-7636

December 11, 1978

Professor Laurie M. Brown Department of Physics and Astronomy Northwestern University Evanston, Illinois 60201

Dear Professor Brown:

I am generally in favor of your proposal for a Division of History Of Physics in APS, but I would like to see some further discussion of the pros and cons before it is submitted to the I believe there was a similar proposal 8 or 10 years ago which was shot down by those who might have been expected to be its supporters. Possibly Charles Weiner could tell you what happened. One might make the following argument against having a Division of History of Physics:

There are two distinct aspects of history of physics, (1) its use by physicists in general, and especially physics teachers, to enhance understanding of physics; (2) scholarly research.

For the first function, it is better to have the history of physics maintained as a topic of interest to all members of APS, rather than isolated in a specialist division comparable to plasma physics. where everyone but the experts can forget about it. The second function is perhaps more appropriately supported by the History of Science Society, since historians of physics with a serious interest in research should emphasize their relation to historians of science and support that organization rather than forming a splinter group.

I don't necessarily agree with the validity of this argument but it should be given some consideration. In any case it seems remarkable that the American Chemical Society, which does have a history division, has done much less in this area than the APS/AIP which does not.

I suggest you send your proposal to the following for comment: Gerald Holton, Arthur Miller [Lowell], Allan Franklin [Colorado], Charles Weiner, Spencer Weart, Sam Schweber, Walter Gross (AAPT).

Yours sincerely,

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Stephen G. Brush

EVANSTON, ILLINOIS 60201

DEPARTMENT OF PHYSICS

AND ASTRONOMY

January 18, 1979

Professor Gerald Holton
Jefferson Physical Laboratory
Harvard University
Cambridge, Massachussettes 02138

Dear Professor Holton:

I am enclosing a draft proposal to the Council of the American Physical Society that advocates the establishment of a Division of History of Physics, and I would be very grateful for any comments you might make. If you favor the proposal, I would also welcome your participation as a sponsor of the proposal.

Although I do not recall having met you, I have been reading your works in the history of physics for some time, with great interest and pleasure. I have had a serious interest in history of physics only for the past few years, and I am engaged presently in a study of the history of the "meson" between 1934 and 1950. I have sent under separate cover two recent short works.

Aside from the proposal to the APS Council I have intended to write to you anyhow, in connection with the meson project. This concerns your case study, "Fermi's group and the recapture of Italy's place in Physics" and the resources to which you refer at the end of that article.

You are certainly aware of the very significant role played by Italian physicists in the two "meson discoveries", the muon and pion — that is, in cosmic ray research. I am sure that you also recognize certain parallels between the development of nuclear and cosmic ray physics in Italy and Japan. For both of these reasons I feel my next logical research should be into Italian physics of the 1930's and 1940's.

I am personally well acquainted with Italian physicists, having lived in Italy as a Fulbright Research Scholar, 1958-60 (Milan, Padua, Rome) and a Visiting Professor in 1967. The person who invited me initially was G. P. S. Occhialini. Although I was not working actively in history of physics then, I do recall various anecdotes of his research and, more particularly, its flavor. I expect to go to Italy

Professor Gerald Holton Page Two January 18, 1979

this year -- in late summer or fall -- and I would like to read as many interviews and documents as are available in this country, to avoid unnecessary duplication of effort, to make proper acknowledgement, and so forth.

If I am able to visit the Boston area in late March (or another time), would I be able to look at some of the material that you and your students have collected, especially that which is not deposited at the Center for History of Physics at AIP? (Incidentally, some of that material is not really accessible. Charles Weiner's interview with Occhialini has not yet been transcribed, as Weiner and I found out recently when we met at AIP.)

I hope to hear from you soon about these two matters, and thank you for your consideration.

Sincerely yours,

Laurie M. Brown Professor of Physics and Astronomy

LMB/cwk

Enclosure

EVANSTON, ILLINOIS 60201

DEPARTMENT OF PHYSICS
AND ASTRONOMY

January 18, 1979

Professor Stephen G. Brush Institute for Physical Science and Technology University of Maryland College Park, Maryland 20742

Dear Professor Brush:

Thank you for your thoughtful response about the proposal to start a Division of History of Physics in AIP. I have thought seriously about your possible "argument" against such a Division, I have discussed it with others (including Roger Steuwer), and I do not believe it has much merit. A Divison would be supportive of both aspects of history of physics that you mention. It would serve the general interest of teachers, in that the sessions it would organize at national meetings would be accessible to all physicists, and it would support those with a more professional interest in history as well -- by acknowledging the contribution of history activities to the activities and health of the physics profession.

In any case, all a prospective sponsor need consider is whether he or she favors establishment of a Division. Arguments against it can be found by those who are opposed (although even those who are uninterested need not oppose the participation of those who are).

I have followed your suggestion that I write to Gerald Holton for his opinion, but I have not written to the others on your list for several reasons. One of them is that I want to involve only AIP members or fellows; another is that I do not want to prolong the matter indefinitely, which would be the case if I were to accept everyone's suggestions as to whom else to write. When I have heard from Holton, I shall contact you again. Until then, thank you again and

Best regards,

Laurie M. Brown Professor of Physics and Astronomy

LMB/cwk

HARVARD UNIVERSITY

DEPARTMENT OF PHYSICS

23 January 1979

JEFFERSON PHYSICAL LABORATORY
CAMBRIDGE, MASSACHUSETTS 02138

Professor Laurie M. Brown Dept. of Physics & Astronomy Northwestern University Evanston, IL 60201

Dear Professor Brown:

Thank you for your letter of January 18. I hasten to reply to it, even if only very briefly. I am so swamped that your good letter might sink to the bottom of the pool if I do not deal with it at once.

Yes, I am in favor of a Division of History of Physics of the APS, and you may add my name to your list. There is a residual problem, i.e., whether the History of Science Society won't regard it as encroaching on its membership—which would be quite unfortunate. I suggest you call A. Thackray and Larry Holmes about this, and also ask Spencer Weart at AIP to take it up this coming weekend with his Advisory Board. I feel sure a way can be devised which does what needs to be done without making it a zero-sum game among the few institutions that now care about history of science.

Among your good arguments might be the following: Precedent of history of chemistry section of ACS. Diversification of competences of some physics graduates, who might teach (write...) in history of science. Considerable amount of teaching in the history of physics as part of offering by Ph.D.-granting physics departments (last time I saw AIP statistics, gathered perhaps by Dr. Ellis at AIP, 12% of such departments offered some history of physics—quite apart from history of science being taught in departments outside physics departments). Availability of research support for history of physics both from NSF and NEH. Number of good journals in this field.

I read your article on the Neutrino with pleasure when it appeared. Italian physics is waiting to be exploited as a history of science field. When you come here, I'll be glad to show you what we have (preferably after the Einstein celebrations!), but your best contacts in town will be Bruno Rosso of MIT and Barbara Buck (% History of Science Department at Harvard). Mrs. Buck started a thesis on 20th-century Italian physics, and knows the sources, libraries, etc., in Italy, though she ended up doing her thesis (in progress) in the 19th century. Charles Weiner at MIT is of course also a good resource.

Looking forward to your visit,

Sincerely yours,

Mallinckrodt Professor of Physics and Professor of the History of

Science

EVANSTON, ILLINOIS 60201

DEPARTMENT OF PHYSICS

AND ASTRONOMY

February 1, 1979

Professor Arnold Thackray Chairman, Department of History and Sociology of Science University of Pennsylvania Philadelphia, PA 19174

Dear Professor Thackray,

I am sorry that my telephone call came at an inconvenient time for a more extended discussion, but Professor Gerald Holton had suggested that I discuss with you the proposed History of Physics Division for the American Physical Society. He favors the creation of such a Division, but he would like to be sure that the History of Science Society will not feel it as a competitive action and, I may add, Stephen Brush raised the same question.

Your "short answer" on the phone seemed to confirm my own view that the proposed Division was more likely to be supportive of HSS, rather than divisive, and I have so indicated in the draft proposal, a copy of which I enclose. I am also going to be sure that Spencer Weart of the American Institute of Physics Center for History is also in agreement with the proposal (he has told me so before it reached so forward a stage), and then I intend to circulate it among members of the American Physical Society, in order to avoid too much procrastination.

Sincerely yours,

Laurie M. Brown
Professor of Physics and Astronomy

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EVANSTON, ILLINOIS 60201

DEPARTMENT OF PHYSICS

AND ASTRONOMY

February 8, 1979

I am sending the proposal to the following people, to ask them to get signatures:

Professor S. Schweber (Brandeis)
Dr. Francis T. Cole (Fermilab)
Professor A. Pais, (Roberfeller)
Dr. Maurice Goldhaber (Brock haven)
Professor F. H. Schmidt (U. of Washington)
Professor Arthur Rich (U. of Michigan)
Dr. Murray Peshkin (Argonne)
Professor Roger Steuwer (U. of Minnesota)
Professor Allan D. Franklin (U. of Colorado)

Please be so kind as to send the enclosed to a few others, and to collect some signatures yourself. Thanks.

Laurie Brown

A proposal to the Council of the American Physical Society to establish a Division of History of Physics:

Certain Members and Fellows of the American Physical Society, whose names are below, hereby request that the Council of the Society consider positively the formation of a new Division of the Society, to be called Division of History of Physics, in view of the following considerations:

- (a) The study of the history of science, and of physics in particular, has important scientific, cultural, and pedagogical value. A number of Members and Fellows of the Society (hereafter referred to simply as members) have an active interest in the history of physics, including that of the twentieth century, carrying on historical research, lecturing, writing, and teaching. Others have a strong, though passive, interest. Historical articles are often published in such journals as Physics Today, Reviews of Modern Physics, American Journal of Physics, as well as (by APS members) in the standard journals of the history of science.
- (b) APS members who are interested in the history of physics will use the new Division to become aware of others with similar interest for the exchange of mailings, contacts at meetings, scholarly collaboration, etc.
- (c) Historical sessions or symposia are often presented at the regular Meetings of the APS, and other individual historical talks are given at sessions of invited papers. This could continue to be done as at present (e.g., by other Divisions), but a Division of History of Physics could be helpful in organizing such sessions and might either sponsor or cosponsor them.
- (d) The proposed new Division could take an active role and advise on special historical conferences and publications, such as the two conferences on the

history of nuclear physics (in 1967, 1969) sponsored by the

American Institute of Physics (AIP Conference Proceedings Number 7 1972).

- (e) The proposed new Division could provide moral and other types of support for the Center for the History of Physics of the American Institute of Physics.
- (f) It could provide a useful liason between APS Divisions and between APS and such groups as the American Association of Physics Teachers, the Optical Society, the History of Science Society, the Division of History of Chemistry of the American Chemical Society, etc.

In view of the above persuasive considerations, we members of APS request the formation of a Division of History of Physics.

Name (print)

Signature

Institution



FOUNDED IN 1912 IN BELGIUM BY GEORGE SARTON OFFICIAL JOURNAL OF THE HISTORY OF SCIENCE SOCIETY UNIVERSITY OF PENNSYLVANIA, 215 SOUTH 34th STREET/D6, PHILADELPHIA 19104

EDITOR Arnold Thackray

9 February 1979

Professor Laurie M. Brown Department of Physics and Astronomy Northwestern University Evanston, IL 60201

Dear Professor Brown;

Thank you for your 1 February letter and your courteous inquiry concerning the relationship between the History of Science Society and the proposed History of Physics Division of the American Physical Society.

I was pleased to see that your proposal suggests that the division could provide a useful liason between the APS and the History of Science Society. Perhaps we can discuss together ways of making this wish into a working reality when your division is established.

With all best wishes.

Yours sincerely,

Anola Thacking

AT/c

EVANSTON, ILLINOIS 60201

November 13, 1979

DEPARTMENT OF PHYSICS AND ASTRONOMY

Professor Albert Wattenberg Physics Department University of Illinois Urbana, Illinoia 61801

Dear A1,

I received Lewis Branscomb's memorandum asking us to serve on an ad hoc committee of the APS Council to be chaired by you. I am very happy to do so, the more so as it was my initiative that initiated the proposal.

As the time for us to make a report is only two months away, with Christmas interviewing, I hasten to send you a copy of the relevant previous correspondence that bears on substantive issues raised by Dr. Branscomb. I have also had a number of conversations with people like Spencer Weart (at the Center for History of AIP in New York), Roger Stuewer (at Minnesota), etc., who are primarily historians of science, and they generally strongly favor the proposed Division. (There is no need for me to mention Holton, Goldhaber, and Klein who are members of the ad hoc committee.)

Gertrude Goldhaber tells me that you raised the question of a "forum" rather than a "division", format for history. I am not sure about the distinction or its implication. I suppose "forums" suggest that all "citizens" can voice their opinions and contribute to the discussion, as in "Forum on Physics and Society." On the other hand, "division" seems to refer to a scholarly specialty. My own view is that the history of physics is a scholarly specialty, even if it is sometimes practiced as a second discipline by some physicists. However, my mind is far from closed on the subject.

On some of the other points raised: very briefly, I believe that AAPT might very well jointly sponsor certain programs on history at APS meetings, might designate a history section or a history issue of American Journal of Physics, or might have a more formal relation to the proposed division or forum if AAPT so desires.

The question of a separate publication has not been raised at this time, but eventually these be enough interest in a new journal (say a quarterly one). There always seems to be a pressure for new publishing outlets, and APS members may prove an eager readership. While I feel it is premature to suggest such a journal now, I see no reason to will e it out for the future.

Whatever method you see fit for conducting the work of the ad hoc committee, I will be happy to cooperate.

With best regards,

Laurie Brown