University of Illinois at Urbana-Champaign

DEPARTMENT OF PHYSICS Loomis Laboratory of Physics Urbana, Illinois 61801

December 3, 1979

TO: Members of the ad hoc committee concerned with the creation of a Division or Forum of the History of Physics (address list attached)

Dear Fellow Committee Members:

As you know from my telephone conversation with each of you, unless an alternative plan is proposed, we will try to prepare by correspondence a report for the APS Council which would help them to evaluate the question of the creation of a Division or Forum on the History of Physics. We will decide later whether we need a conference telephone call and/or a meeting. The report should include at least material concerning the purpose, need, and appropriateness of such a division or forum being within the American Physical Society.

Several of you already have undertaken to help on the matter of the reaction of other organizations which are involved in the history of physics. Specifically, Holton, with the help of Byers, is contacting the American Association of Physics Teachers. He is also contacting the History of Science Society directorship. Klein is going to try to provide material from the people involved with the AIP Center for the History of Physics. Fowler will be in contact with the astrophysicists who have an interest in the history of physics. Bill Havens, as required by the Constitution of the APS, has informed the divisions of the APS of the proposal, and you should be receiving a copy of the letter that Bill Havens has sent to the various divisions. (I have not yet seen the letter.)

In regard to "purpose and need", I hope that we can use as a starting point the original proposal drafted by Brown which has been circulated and signed at a number of institutions. I feel that some additional material on "need" should be spelled out. I would like to start the ball rolling on modifications of this statement by suggesting that you send suggestions directly to Laurie Brown with a copy to everyone on the committee. The proposal of Laurie Brown with some accompanying correspondence is enclosed with this letter.

Lew Branscomb in his letter raises the question of whether the Council should have an expectation that there might attend the formation of a division or forum a request for additional publications services. Those of you who have definite expectations, either positive or negative, in this regard should inform the rest of us.

I hope that you will try to prepare statements that can be submitted in some form (appendices or main body) to the Council and that you will circulate the material to all members of the committee. I suggest that you feel free to

contact each other directly if there are suggestions or things that are objectionable. Let me know if substantive divergences of opinion remain unresolved. When I have received from you the written material, I propose to contact all of you as to whether we are in a position to prepare a report for the Council. I would welcome others offering to draft a report. If there are no volunteers, I accept that it is my responsibility. After we receive comments on a first draft, we can decide whether we should resolve any divergent views by a conference telephone call, a meeting, or by further correspondence.

I recognize that in phoning you and offering a suggestion on how to proceed, most of you were not given adequate time to propose alternatives. I am open to alternative suggestions for procedures and if on further thought, you are unhappy with the present mode of operation, please call me or write to me immediately. In regard to how to proceed after we have gathered the first material, I certainly would appreciate your input. I do not wish to preclude our including material beyond that which was asked for in Branscomb's letter. If you feel that additional topics should be covered in our report to the Council, please let me know as soon as possible.

I want to thank you very much for being receptive to undertaking various chores in regard to the work of this ad hoc committee, and I hope that our efforts will not consume a significant amount of your time.

Sincerely.

A. Wattenberg

AW/ds

Enclosures

Members of the ad hoc committee concerned with the creation of a Division or Forum of the History of Physics:

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CENTER FOR HISTORY OF PHYSICS Spencer R. Weart, Director Joan N. Warnow, Associate Director

December 10, 1979

Dr. Martin J. Klein
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Science of Medicine
Yale University
Box 2036, Yale Station
New Haven, CT 06511

Dear Martin:

This is in response to your query about possible relations between the AIP Center for History of Physics and the projected History Division of the American Physical Society.

As you know, I've been enthusiastic from the start for the History Division, and hope it will be formed. It is likely to complement and support rather than compete with the AIP Center. For example, we have never been able to organize or promote historical sessions at society meetings to the extent we would have preferred, and a History Division will certainly be able to take care of this.

The only problem I can foresee might arise if the Division were to charge dues, and if members of the Division who are also Friends of the Center for History of Physics suppose that they should reduce their donations to us accordingly. I'm sure that ways can be found to circumvent such a possibility, and indeed, I expect members of an APS History Division would be likely to become Friends of the Center as well.

There are good opportunities for cooperation. For example, the AIP Center's <u>Newsletter</u> could be sent to all members of the Division, with an additional page or so of divisional news, funded by the same mechanism as other divisions' newsletters. In sum, from the standpoint of the AIP Center, or (which I hope is almost equivalent) from the standpoint of promoting the history of physics, the proposed APS History Division will be welcome.

Sincerely yours,

Spencer R. Weart

SRW/rd

Report by Gerald Holton to the ad hoc committee considering a division on the history of physics.

As we agreed at the time, I was to contact some leading people in the history of science and in the AAPT to gauge their reaction to the creation of a history of physics entity in APS.

- 1) I talked first with a number of historians of science that might be concerned or interested. My discussion with Professor Erwin Hiebert, a recent president of the History of Science Society and now chairman of the History of Science Department at Harvard, was quite typical. He is in favor of the idea, thinks members of the History of Science Society would also applaud it, and he saw no threat to the History of Science Society. Some hope was expressed that a historian of science might join such a division without being obligated to pay the full dues of an APS membership; but I believe that might not be easy to arrange (though of course I would be glad to be wrong about that). The only negative element or risk, in his opinion, is that such an entity should be run by people who are in fact publishing and/or teaching scholars in the field of the history of science (in addition to their professional status as physicists). Otherwise, he would fear that the division would become subject to amateurism in the pejorative sense.
- 2) Another influential and alert member of the History of Science Society is Professor Arnold Thackray of the Department of the History of Science at the University of Pennsylvania, and now Editor of ISIS, the venerable journal of the History of Science Society. He said he would "bless and applaud" the creation of a division. He noted that the American Chemical Society had such a division (since 1928) which, like all human organizations, has had its ups and downs, but has been lively and useful when run by energetic and productive people. He hoped that consultation with the History of Science Society would take place, e.g., on the possibility of occasional joint meetings; as Editor of a history of science journal, he would also be concerned if a new journal were to be started in this field at this time without consultation with a journal such as ISIS.
- and the History of Science Department at Harvard. He is greatly interested in the possibility of an APS equivalent to an initiative in which he is now involved, as you probably know. The American Astronomical Society is starting a division of historial astronomy this winter; one of its functions is the history of astronomy itself. Owen Gingerich, with a group of others that include Kenneth Brecher of Boston University and Phil Morrison of MIT, has worked out by-laws of a such division, and a copy of these can undoubtedly be obtained from him for information. They have early and well-formed plans for meetings in the American Astronomical Society.
- 4) In a long call in which Nina Byers also participated, I had the chance to talk with Spencer Weart of the American Institute of Physics, who is giving a report of his ideas at more length through Martin Klein. Spencer tells me that both as a historian of science and the head of the American Institute of Physics' Center for the History of Physics, he supports the idea of a division or forum "enthusiastically." It

would increase participation of scientists in urgent work on the history of recent physics; would raise the consciousness of physicists and the visibility, and hence fundability of the AIP Center; it would offer opportunity for collaboration on the part of the AIP Center with the division, for example in sending its Newsletter to the members of the APS division if this should be thought a good idea; and it would at last make it possible to have regular scheduling and long-range planning of history of physics programs in connection with APS meetings, either in the meetings of such a division and/or as part of regular APS meetings. Among other ideas he mentioned also that such a division would allow the formation of specialty conferences, e.g., on the history of solid state, of government science laboratories, of the history of the contribution of women scientists, etc., with access from knowledgeable physicists who otherwise might not have or use the opportunity of participation in such meetings.

- 5) Turning to persons more closely identified with the AAPT, I talked at some length with Arnold Strassenburg of Stony Brook, who is the Executive Secretary of the AAPT and the long-term official in the AAPT. That organization has of course devoted time in its meetings and space in its publication to the history of science, and Professor Strassenburg said he believed the members on the whole wished to continue this part of the AAPT work vigorously. He would be pleased with an APS division; would hope to be allowed to explore joint sessions with the AAPT; though this would aid in AAPT attempts to induce regional chairpersons to include history of science in their meetings; and foresaw other uses such as getting persons more readily to write history of science oriented resource letters for the AAPT journal, the American Journal of Physics.
- 6) I also had a telephone discussion with Professor John Rigden of University of Missouri at St. Louis, who is now the Editor of the American Journal of Physics. He also felt that an APS division would be helpful to his journal, in which there has been excellent response from readers for articles dealing with the history of physics. Professor Rigden volunteered to respond also directly along these lines to any inquiry from APS.
- 7) Other remarks. I had originally raised the point that it would be important to check out our early plan with History of Science Society/AAPT persons, to avoid belated discoveries that an APS division or forum might somehow be unwelcome, e.g., for fear of splintering a subcritical group. It turns out that nobody I talked to among these knowledgeable people saw this as a real obstacle, and that, on the contrary, many reasons exist for welcoming the proposed move.

There remains an important point: none of us seems to know for sure what the advantages or disadvantages are of a division versus a forum. There was some guessing that a division, but not a forum, means in practice that a) the Council of the APS would contain an elected representative of the division; b) the division would have the right to hold divisional meetings with its own program, apart from and in addition to meetings with the APS as a whole; c) that divisions have the opportunity to collaborate on a regular basis in setting up particular sessions or speakers as part of regular APS meetings.

A number of the persons I spoke to would be rather worried if forum status did not include such possibilities, and some might indeed not want to be associated with a forum if it has a more marginal chance to function than does a division. We note in this connection that the petition did specify division status and not forum status.

Center for Astrophysics

60 Garden Street Cambridge, Massachusetts 02138

Harvard College Observatory Smithsonian Astrophysical Observatory

December 26, 1979

Prof. William A. Fowler California Institute of Technology W. K. Kellogg Radiation Laboratory 106-38 Pasadena, California 91125

Dear Willy:

I have read with interest your letter and associated papers concerning the formation of a Division of the History of Physics in the American Physical Society. Although I foresee no problems arising in the competing area of astrophysics, your letter affords me the opportunity to remark further on some of the similarities and differences between the two proposed divisions.

Astronomy differs from physics in that a small but important subset of its data is rooted in historical records. I need only point to the historical records of supernovae, without even mentioning the vagaries of the sunspot cycle, to establish this point. It is partly for this reason that we are organizing not a division of the history of astronomy, but a division of historical astronomy. Hence the proposed division not only includes the standard history of astronomy, but also what might be called applied history (e.g. the supernovae). In addition, we shall encompass the growing interest in the area of archeoastronomy, with a firm determination to prevent this topic from falling into the hands of the pseudo-scientific fringe.

I think that the organizational aspects in astronomy differ from those in physics in another significant way: for the past twenty-five years the International Astronomical Union has had a very active commission on the history of astronomy. When this commission was founded, it was made up primarily of professional astronomers with an amateur interest in the history of science, largely because there were so very few who could qualify as "professional" historians of astronomy. This commission has become increasingly professionalized, and now represents a group of scholars working on the historical

problems with extremely high standards. It is interesting to note in passing that although the nucleus is rather small, the open meetings scheduled by the Commission at the IAU Congresses draw a very large audience of interested astronomers.

During these same twenty-five years, scholarly work on the history of astronomy has matured to a professional respectability that it did not formerly have. I can well remember in my early days as an astronomer that doing the history of astronomy was regarded as a fit activity for retired astronomers or those incapable of doing pure astronomy. I must confess that I was frankly worried by the proposed AAS Division of Historical Astronomy because of the possibility that the entire amateur-professional relationship would have to start again from level zero. Even before the historical division has been formed, we have had an overwhelming response, and it looks as if at least a third of the AAS membership will apply for membership in the Historical Division!

I think that I detect, in a muted way, some of the same objections in some of the letters you sent from the historians of physics.

On these specific matter of interaction with the corresponding APS Committee, we will be very glad to keep in touch, and we might wish at some point to co-sponsor a meeting relating to our common interests. (We should keep in mind, however, that such interactions have already been taking place through the AAAS, particularly through collaborative efforts with Section L). Our AAS Historical Astronomy Division does not intend to get into the business of preserving archival records nor of obtaining oral history documents. For these matters we would expect to encourage and to co-operate fully with the Niels Bohr Library at the AIP in New York. Presumably the APS Division would take a similar stance.

I shall be at the AAAS in San Francisco, then briefly in the Los Angeles area (and possibly in Pasadena) and then back to San Francisco for the AAS meeting. Perhaps I will see you at one of those places.

Sincerely yours,

Owen Gingerich

Professor of Astronomy and the

History of Science Harvard University

OG/jj

Xc: A. Wattenburg

Spencer Weart