



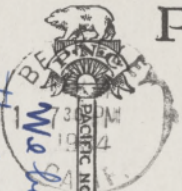
CAMPANILE, UNIVERSITY OF CALIFORNIA #206



POST
CARD

ADDRESS

Prof. Otto Stern
Carnegie Institute of Technology
Dept. of Physics
Pittsburg
Pa.



We have been celebrating

with your champagne,
Robert Oppenheimer, Melba Phillips,
husky and I. Come out next
summer and we'll have another
party!! Yes, celebrating your
generosity & its occasion, & wish-
ing that you might come again
to Berkeley. How is it with the
family & the ship?

Oppenheimer
& myself
Melba Phillips
mailed
Berkeley

Could you give a public lecture here Monday April 29
collect
8:30 p.m.stop please wire if you accept and subject
stop probable honorary one hundred dollars including
expenses.stop will be very glad to see you here and
in Washington.

Otto Stern
Carnegie Institute of Technology

UNIVERSITY OF CALIFORNIA

DEPARTMENT OF PHYSICS

BERKELEY

March 15, 1934

Professor O. Stern
Department of Physics
Carnegie Institute
Pittsburgh, Pa.

Dear Professor Stern:

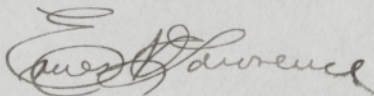
Please excuse me for this delay in reply to your letter of February 20. I have been waiting day by day to write you, thinking my plans for the summer would clear up, but my plans are still up in the air. Since last writing you I have accepted an invitation to spend a month at the University of Michigan and it is not settled yet whether it shall be for the first half or the second half of their summer school.

In any event, I am counting on seeing you some time while in the east, and I still have hopes that I may come east early enough to stop by Pittsburgh before the close of the semester.

I am sending some reprints under separate cover. I am waiting to hear what the magnetic moment of the deuteron is.

With kindest regards to Esterman and yourself, I am,

Sincerely yours,



EOL:GAA

UNIVERSITY OF CALIFORNIA
DEPARTMENT OF PHYSICS
BERKELEY

April 8, 1935

Professor Otto Stern
Department of Physics
Carnegie Institute of Technology
Pittsburgh, Pennsylvania

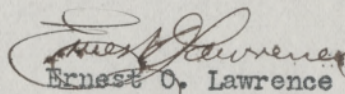
Dear Professor Stern:

I am coming east for the Washington meetings and I am scheduled to give a lecture at Ohio State (Columbus) on the evening of April 30, and another at Swarthmore on May 1, so it should be possible for me to stop off to see you on the way to Columbus and I certainly would like to do so. As far as I can tell now, I see no reason why I could not spend the whole day of Monday, April 29 there, catching a late train for Columbus.

Things are going along very nicely and I must confess that I am not very anxious to leave Berkeley with so many interesting things going on in the Laboratory. However, I am looking forward to having most of the summer here. Doubtless you are having a busy time in the laboratory too. I understand that last summer you went over to Germany, and might I suggest that you come out to see us this summer instead?

I presume I shall see you in any case at the Washington meetings. With kind regards to Estermann and yourself, I am

Sincerely,


Ernest O. Lawrence

EOL:W

February 20, 1934.

Professor E.O. Lawrence
Department of Physics
University of California
Berkeley, California.

My dear Lawrence;

I am delighted to learn from your letter of February 6 that you plan to come to the East this spring. Of course we would like it very much to have you lecture here in Pittsburgh. Since our semester ends early in June, it would be convenient for us to have you here as early as possible. You wrote about the third week of May, what is the earliest date you could be here?

I was very much pleased to hear that you are delighted to send me your reprints, but until now, I have not received any.

We hope to have the magnetic moment of the deuteron in a few weeks.

With kindest regards,

Sincerely yours,

UNIVERSITY OF CALIFORNIA
DEPARTMENT OF PHYSICS
BERKELEY

February 6, 1934

Professor Otto Stern
Department of Physics,
Carnegie Institute of Technology,
Pittsburg, Pa.

My dear Professor Stern:

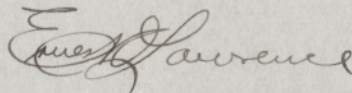
I received several invitations similar to yours, to give lectures in the east this spring and therefore it is possible for me to make the trip. Would it be convenient for you if I came to Pittsburg some time during the third week of May? Although that time would be most convenient for me, yet I could arrange to be on hand the following week.

Last Friday evening Molly and I invited Robert Oppenheimer and Melba Phillips to dinner at our house, and took the occasion to consume the bottle of champagne which you sent about a year ago. The champagne was much appreciated (even our maid had a taste of it), and we all drank your health. Robert and I took the occasion to write you a postcard, which I presume you have received.

I need hardly say that I am delighted to send you reprints. Perhaps you will remember it was your enthusiasm one evening during dinner at Solari's for the proposed method of multiple acceleration of light ions, that stimulated me to begin the development of the method.

With kindest regards, I am,

Sincerely,



EOL:GAA

January 9, 1934.

Professor Ernest O. Lawrence,
Department of Physics,
University of California,
Berkeley, California.

My dear Lawrence:

With great pleasure and surprise I received your kind
smokable New Years greetings and thank you very much. Everytime
I smoke a Fighting Bob, I see in my mind beautiful California.
You know, I would like very much to see it not only in my
mind.

Our experiments proceed ~~slowly~~; how about your experiments.
I would like very much to get reprints of your papers.
Please write me in time, when you are going East next spring.

With the best regards to all the friends in Berkeley
and to yourself

yours sincerely

UNIVERSITY OF CALIFORNIA
DEPARTMENT OF PHYSICS
BERKELEY

November 20, 1933

Professor Otto Stern,
Department of Physics,
Carnegie Institute of Technology,
Pittsburgh, Pa.

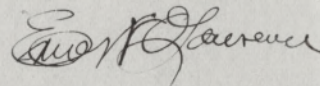
Dear Professor Stern:

I enjoyed immensely the short visit with you, and am sorry it was so short. However, no doubt we will be seeing each other again before long, either in California or in the east.

I spoke to Latimer and Lewis about the possibility of getting H^3 in quantities great enough for your use. They say that there is no immediate prospect of doing this, but it is not entirely out of the question for the future. I have the impression that they are a pretty long way from getting H^3 in appreciable quantities; but they have no doubt but what they have detected H^3 all right.

With best wishes to yourself and Estermann, I am,

Cordially yours,



EOL:GAA

November 8, 1933.

Dear Lawrence:

I have heard from Rabi that you are now on your way back from the Solvay congress and are stopping in New York to give a lecture on November 9. As you probably know, I am now in Pittsburgh as well as Estermann. I should like very much to see you again and I hope you feel the same way. Since Pittsburgh is on your direct route to Berkeley, I am sure you will stop here. We could ^{probably} arrange for you to give a lecture here (75 Dollars), but we have to announce it a week ahead.

If you think to stay in the East so long, please notify me at once, giving the date and the subject of this lecture, so that I could make the necessary arrangements. If this is not convenient for you, I hope you will visit us anyway, and I should, of course, be very glad to have you and Mrs. Lawrence as my guests as long as you wish to stay here.

Hoping to see you soon, I remain
yours sincerely

Otto Stern

UNIVERSITY OF CALIFORNIA
DEPARTMENT OF PHYSICS
BERKELEY

January 18, 1932

Prof. Dr. O. Stern
Institut f. Physikalische Chemie
Hamburgischen Universitat
Hamburg, Germany

Dear Professor Stern:

I enjoyed very much your letter and I am indeed grateful ^{very} for the accompanying statement.

I am sorry to hear that the financial situation is so bad in Germany that you do not feel able to come over here again next summer, and I sincerely trust it is only a very temporary matter.

Professor Franz Simon, who is lecturing here this semester, as you probably know, is living next door to me at the Club, and already we have become quite well acquainted. I find him an exceedingly charming fellow.

Our experiments on the production of high speed protons are coming along admirably. At the moment we are installing a very large electromagnet weighing about 85 tons, and it is our hope before long to be producing 5 million volt-protons.

Thank you very much for the invitation to visit you next summer. Ordinarily I should like to come, but it will not be possible for a very special reason, namely, that I am to be married in May.!!!

With best wishes and highest personal esteem, I am

Sincerely yours

Ernest O. Lawrence

Herrn

Prof. Dr. Ernest O. Lawrence
University of California, Department of Physics
Berkeley

Dear Lawrence,

Ich bestätige Ihnen gern, dass Sie mir bei meinem Aufenthalt in Berkeley Anfang 1930 oft von Ihrem Verfahren zur Erzeugung von sehr raschen leichten Ionen in der Form, wie Sie es jetzt publiziert haben (elektrisches Wechselfeld im Magnetfeld), erzählten und zwar zuerst im Januar 1930. Sie zeigten mir auch eine vorläufige Magnetapparatur in Ihrem Laboratorium, ungefähr März 1930. Anfang April bin ich ja bereits aus Berkeley abgereist.

Mit besten Grüßen

Ihr

(Otto Stern)

2. November

31.

Herrn

Prof. Dr. Ernest O. Lawrence
University of California, Department of Physics
Berkeley

Dear Lawrence,

Unglücklicherweise war ich verreist, als Ihr Brief hier eintraf und bin erst kürzlich zurückgekommen. Hoffentlich kommt meine Antwort noch zurecht. Ich füge beiliegend den von Ihnen gewünschten Brief bei, hoffentlich ist es so richtig.

Ich würde furchtbar gern wieder mal nach Californien kommen, aber die unsäglich schlechte finanzielle Lage hier macht es leider vorläufig unmöglich. Kommen Sie hin und wieder mit Estermann zusammen? Wie geht es Ihnen und den anderen Freunden in Berkeley, Lewis, Gibson, usw.? Grüßen Sie bitte alle sehr von mir. Kommen Sie nicht bald mal nach Europa? Ich würde mich wirklich sehr über Ihren Besuch hier freuen.

Mit herzlichen Grüßen
Ihr

(Otto Stern)

UNIVERSITY OF CALIFORNIA
DEPARTMENT OF PHYSICS
BERKELEY

September 12, 1931

Professor Otto Stern
Physikalisches Institut der Universität
Hamburg, Germany

Dear Professor Stern:

The method for producing high speed light ions (such as protons) which I described to you when you were here and which you so strongly urged me to experimentally try out has been very successful. We have now succeeded in producing protons having energies in excess of 1,100,000 volt-protons and are busy with the installation of a large magnet which should ultimately lead to the production of 25 million volt-protons. I am sure you will be interested in knowing about these developments since you were so instrumental in getting me started on the experimental test of the method. Probably if you hadn't urged me so strongly I would not have started the development of the method until some time later.

I have just received information to the effect that a large electrical corporation has applied for patents on the fundamental processes involved in our methods. Originally I did not intend to patent the processes, but the Chemical Foundation has urged me to do so and in view of the attempt on the part of this large electrical company to patent our things, I am now anxious to do so. The most important information in connection with an application for a patent is the "date of birth" of the fundamental principle or idea. I therefore am taking the liberty of asking if you would be so kind as to write me a letter stating approximately the date of the occasion when I described the principle of the combination of alternating electric and magnetic fields in the successive accelerations of ions to high speeds. I understand that it is desirable in this to attach to the statement one or two signatures of witnesses, perhaps two other men in the laboratory. I am sorry to trouble you in this way, but it seems to be a rather important matter, and I will appreciate it a lot if you will do this for me.

I certainly have not forgotten your promise to come back to see us and I am hoping that your visit will be next summer. We are installing the large magnet referred to above and by next summer we should have a good laboratory for the study of

Professor Stern - Page 2 - 9/12/31

high speed charged particles in full operation. Since you were here I have found some other good places to eat in San Francisco and I know they will interest you. When you come over I will be in a much better position to show you a good time.

With best wishes and cordial regards, I am

Sincerely yours

Ernest O. Lawrence
Professor of Physics

EOL:HD

October 18, 1935

Professor E. O. Lawrence
Radiation Laboratory
University of California
Berkeley, California

Dear Professor Lawrence:

Thank you very much for your kind letter of October 1. I took great pleasure in reading it, especially in learning that you found the trouble with the cyclotron. It certainly would be wonderful if you can keep the cyclotron working regularly with such high energies as you expect. I also hope that Laslett will now be able to do the experiments without further difficulties. I have not heard from him for some time.

I am really very sorry about Dr. Baker's retirement. The problem to find a successor for him is of course a very hard one, and I do not know anything about the plans of the trustees. Let's hope for the best.

I want to apologize for not having written to you earlier. I have wanted to do it every day since I came back to Pittsburgh and to thank you for the very good time I had in the Radiation Laboratory. You know very well how much I like Berkeley, and how glad I was to be there. The Radiation Laboratory is certainly a great newly added attraction. I really learned a lot of new things there and enjoyed it very much. Be sure I shall visit Berkeley again.

My best greetings to all the Berkeley people, especially to yourself.

Sincerely,

OS/B

UNIVERSITY OF CALIFORNIA

DEPARTMENT OF PHYSICS

BERKELEY

October 1, 1935

Professor Otto Stern
Carnegie Institute of Technology
Pittsburgh, Pennsylvania

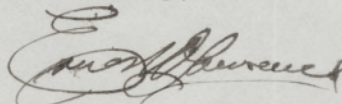
Dear Professor Stern:

I suppose Laslett has written you that we have the cyclotron working again and that soon we should have some results to report to you. Less than a week ago we located the cyclotron trouble that has been bothering us these past two months. In the past we have not had a choke coil between the dees and the ground and have depended on the conductivity of the cooling water to prevent a charging up of the accelerating system. We suspected that there might be a rectifying action which was charging up the dees, and inserted a choke coil between the west dee and ground, and immediately found that all our troubles vanished. Not only did all of the cathode ray trouble ~~with the shield~~ disappear, but also we had no difficulty in getting large currents. Yesterday we were working with as much as 9 microamperes at 4.2 MV, and find that our limitation now is due to water-cooling of the dees and target system. We therefore decided to open up the tank this morning and make alterations for more water cooling, and I am sure that before long we will have regularly 10 microamperes at 5 MV. I feel very much annoyed with myself for having overlooked the necessity of a choke coil all this time. Many times I have thought about it, but haven't felt strongly enough that such a coil was necessary actually to connect one in. However, I am sure now that we are through with any further extended troubles with the cyclotron, and that we will regularly be having plenty of intensity of deuterons and neutrons. Before very long Laslett should have some results to report to you.

I have just noticed in SCIENCE that Dr. Baker has retired on account of ill health. I hope that the succeeding president will have a proper appreciation of the laboratory of molecular physics.

We all, and I particularly, enjoyed your stay out here this summer, and hope that the visit will be repeated soon. Give my regards to Estermann.

Sincerely,



EOL:Y