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ZÜRICH 2
23.VII.14
NEUMÜNSTER
Herrn Dr Otto Stern
& Otto Stern
Zürich
Universität
Gemeinstrasse

Sehr geehrter Herr Kollege!

Ich danke verbindlichst für Ihr Referat über die Theorie der Gasdissoziation, das ich mit vielem Interesse durchgelesen habe, wenn ich auch alle Einzelheiten Ihres Gedankenganges nicht ganz verarbeitet habe – dazu brauchte ich bei meiner bescheidenen Vertrautheit mit dem Gegenstand sehr viel Zeit.

Wir sind gerade mit Messungen $Br_2 \rightleftharpoons 2Br$ beschäftigt, aber ich fürchte, sie werden nicht so genau werden wie beim Jod, weil die Diss. bei erreichbaren Temperaturen noch nicht

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No. 10x 64/7

JOYOUS CHRISTMAS

AND

A HAPPY NEW YEAR

Hoffentlich geht es Ihnen gut und Sie hatten es angenehm in Zürich! – Bei uns ist alles in Ordnung.

Viele herzliche Grüsse,

Ihre Valentin und Tony i Baumann

AIR MAIL

PRINCETON, N.J.
DEC 20
-PM
1964

6.26, XII, 64

Professor O. Stern
759 Cragmont Ave.
Berkeley 8, Calif.

Bargmann
50 College Rd.
Princeton, N. J.

★ World of Music — Europe . . . painting contributed by Tom Eckersley of the United Kingdom to benefit UNICEF, the United Nations Children's Fund. ★ Magie de la musique — Europe . . . peinture offerte au Fonds des Nations Unies pour l'enfance par l'artiste britannique Tom Eckersley. ★ El mundo de la música — Europa . . . obra donada por Tom Eckersley del Reino Unido. Contribución al UNICEF, el Fondo de las Naciones Unidas para la Infancia. ★ Мир музыки — Европа . . . художник Том Экерсли, Соединенное Королевство. Подарок Детскому фонду Организации Объединенных Наций (ЮНИСЕФ). ★ 音樂世界——歐洲...聯合王國多姆・愛克斯勒繪贈聯合國兒童基金會。

PRINTED IN U.S.A.

賀 Season's Greetings

賀 С Новым годом

新 Meilleurs Voeux

禧 Felices Fiestas

Liebe Herr Hern,

Wir hoffen sehr, dass es Ihnen recht gut geht!
Haben sie meher Reisepläne? Wir hoffen, 1970 in
Zürich zu sein.

Die allerherzlichsten Wünsche zu den Feiertagen
und zum neuen Jahre, Ihre Valja und Tonja Bergmann

AIR MAIL

Professor O. Stern
759 Cragmont Ave.
Berkeley 8, Calif.

Le 24 XII, 1968

Bargmann, 50 Western Way, Princeton, N.J. 08540

Es war so nett mit Ihnen in der Tiefenau zu plaudern - vielleicht ergibt sich wieder einmal die Gelegenheit.
Unsere besten Wünsche zum Neuen Jahre.
Tonja und Valentin Bärgmann

Jungle . . . collage contributed by Lena Stöckli, Swiss resident in Peru, to UNICEF, the United Nations Children's Fund.

☆

La jungle . . . Collage offert par Lena Stöckli (Suisse), résidant au Pérou, à l'UNICEF, Fonds des Nations Unies pour l'Enfance.

☆

En la selva . . . Obra de Lena Stöckli, de Suiza, residente en el Perú. Contribución al UNICEF, el Fondo de las Naciones Unidas para la Infancia.

☆

Джунгли . . . Монтаж Лена Стокли (Швейцария; живет в Перу), подаренный ЮНИСЕФ — Детскому фонду Организации Объединенных Наций.

☆

叢林...剪貼，瑞士旅居秘魯僑民蓮娜史特克利製贈聯合國兒童基金會。

PRINTED IN DENMARK

恭賀 Season's Greetings

С Новым Годом

新禧 Meilleurs Voeux

Feliz Año Nuevo

Liebes Herr Herrn

Hoffentlich hatten Sie eine schöne Überfahrt und alles ist glatt gegangen. Nun sind Sie wieder im sonnigen Californien, und wir haben gerade den ersten Schnee, der einem erst recht Heimweh nach der Schweiz macht.

AIR MAIL

Professor Otto Stern
759 Cragmont Ave.
Berkeley, Calif.

b. 29, XII, 63

Bargmann
50 College Rd.
Princeton, N. J.

Gay Head cliffs on beautiful Martha's Vineyard Island. This brilliant headland of vari-colored clays marks the entrance to Vineyard Sound.

Pub. by D. C. Thompson, Vineyard Haven, Mass.

Plastichrome by COLOURPICTURE PUBLISHERS, INC., Boston Mass., U.S.A.

Color photo by DeWolf Thompson

WINNEMSHA, P5577 SEP 9 A.M. 1967 02552

AIR MAIL POST CARD

Liebes Herr Stern,
herzliche Grüße vom
unserer Sommerfrische.
Es tut mir aufrichtig
leid, daß wir uns in
New York nicht mehr
gesehen haben. Hof-
fentlich das nächste
Mal.
Mit den besten Wünschen
von meiner Frau und
mir
Ihr
Valentin Bergmann

Professor O. Stern
759 Oragmont Ave.
Berkeley 8
California

33 Cedar St.,
Rockville Centre, L.I., N.Y.
September 17th, 1945

Dr. Otto Stern,
Molecular Physics Laboratory,
Physics Department,
Carnegie Institute of Technology,
Pittsburgh, Pa.

Dear Dr. Stern,

Massachusetts Institute of Technology has opened up a new series of appointments called research associateships. These appointments pay sufficiently well that men with families can afford to return to school under this arrangement. They call for research only and the hope is that through this arrangement M.I.T. can profit by having experienced research men to carry out new investigations while the recipients of the same can profit by renewing their acquaintanceship with physics through courses in fields of research which have been active during the war. They also offer an opportunity to complete a doctorate degree.

During the war as you may know I worked first at the Underwater Sound Laboratory of Harvard University and then at the S.A.M. Laboratory of Columbia University. Here I worked on the isolation of U 235 by diffusion methods under the direction of Dr. Urey and Dr. Dunning. The work was unusually interesting and involved a number of good physical problems. However the pace as you may surmize was so hectic that very little opportunity remained to keep abreast of other fields of physics. I, therefore, feel that I will benefit greatly through the work offered at M.I.T. if I should be so fortunate as to receive an appointment there.

I would greatly appreciate it if you would write a letter of recommendation for me in support of my application. This letter should be sent to

Dr. John C. Slater, Head of the Department of Physics,
Massachusetts Institute of Technology, Cambridge 39, Mass.

May I say that it gave me very sincere pleasure to hear that you were awarded the Nobel Prize in Physics.

Very truly yours,
James H. Bacon

N. F. Bacon,
33 Cedar Ave.,
Rockville Centre, L. I., N. Y.

NEW YORK, N. Y.
SEP 1[illegible]
6-PM
1945

STATION

UNITED STATES POSTAGE
3 CENTS 3

Dr. Otto Stern,
~~Molecular Physics Laboratory,~~
~~Physics Department,~~
~~Carnegie Institute of Technology,~~
~~Pittsburgh, Penna~~

759 Cragmont Ave.,
Berkeley 8, Calif.

Please forward if necessary


PITTSBURGH, PA.
SEP 19
7 30 PM
1945

CALIFORNIA INSTITUTE OF TECHNOLOGY
PASADENA 4, CALIFORNIA

Air mail

23.I

Professor Otto Stern,
Carnegie Institute of Technology,
Pittsburgh, Pennsylvania.

Please forward

Barnett

CARNEGIE INSTITUTE OF TECHNOLOGY
METALS RESEARCH LABORATORY
SCHENLEY PARK - PITTSBURGH

PITTSBURGH, PA.
NOV 10
10:30 PM
1944
2

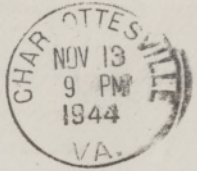
Dr. O. Stern

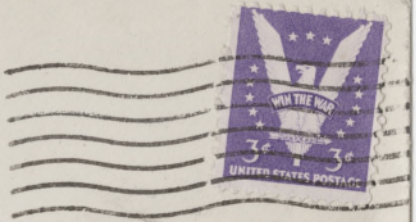
P

Barrett

Rec'd at Pittsburgh Pa
Without Address

J. W. Beams
ROUSS PHYSICAL LABORATORY
UNIVERSITY OF VIRGINIA
UNIVERSITY STATION
CHARLOTTESVILLE, VIRGINIA





21. XI

Professor Otto Stern
Carnegie Institute of Technology
Pittsburgh, Pennsylvania

ALFRED BERGMAN
80 BROAD STREET
NEW YORK, N. Y.

NEW YORK, N.Y.
NOV 24
7 - P.M.
1944

CHURCH STREET
ANNEX

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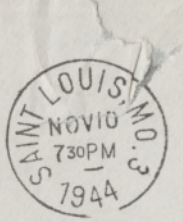
WIN THE WAR
UNITED STATES POSTAGE

221

Dr. Otto Stern
Carnegie Institute
Pittsburgh, PENNSYLVANIA



Professor Otto Stern

Bert

Morwood Garden Apts.

Pittsburgh, Pa.

HOTEL STATLER

ST. LOUIS

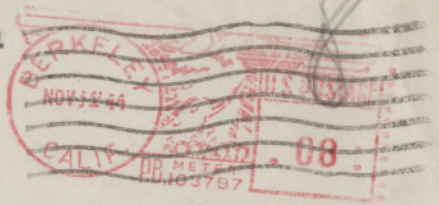
Dr Otto Stern
Shorewood Gardens
Shorewood Ave.
Pittsburgh
Pa.

Mr. Berl P

UNIVERSITY OF CALIFORNIA
DEPARTMENT OF PHYSICS
BERKELEY 4, CALIFORNIA

VIA AIR-MAIL

BERKELEY 1 NOV 1 P 3:30 PM 1944 CALIF.



22.XI

Birge

Professor Otto Stern
Carnegie Institute of Technology
Pittsburgh, Pennsylvania

from: H. Birnbaum
5800 Marshall Road
Pittsburgh 17, Pa.

PITTSBURGH, PA.
NOV 16
5-PM
1944

Dr. Otto Stern
Physics Department
Carnegie Institute of Technology
Schenley Park
Pittsburgh Pa.

Professor Otto Stern.
Metallurgical Laboratory.
University of Chicago.
Chicago (Ill).

2117 P
Block

F. Bloch · 34 Bates Street. Cambridge. Mass.

Professor O. Stern,
759 Cragmont Ave.,
Berkeley, California,
U.S.A.

b. 14. X. 1966

Monash University Clayton, Victoria

SPM 122

MONASH UNIVERSITY

TELEGRAMS:
MONASHUNI, MELBOURNE

P.O. BOX 92.
CLAYTON, VICTORIA

TELEPHONE:
544-0611

DEPARTMENT OF PHYSICS
PROFESSOR R. STREET

10.10.66

Professor O. Stern,
759 Cragmont Ave.,
Berkeley, California,
U.S.A.

Dear Professor Stern,

A colleague, Dr. Beaton, and I are making a collection of Physics papers originally written in German and which illustrate the progress of Physics during the present century. We would very much like to include part of your papers with Professor Gerlach. We have been in touch with Professor Gerlach and he has given his permission; we would be very grateful if you could give us your permission.

With best wishes,

Yours sincerely,

H.C. Bolton

H. C. BOLTON

(Professor of Theoretical Physics)

HCB/ac

Stern, O.	Zeitschrift für Physik 7 (1921) 249. Ein Weg zur experimentellen Prüfung der Richtungsquantelung im Magnetfeld.
Gerlach, W. u Stern, O.	Der experimentelle Nachweis der Richtungsquantelung im Magnetfeld. Zeitschrift für Physik 9 (1922) 349.
Gerlach, W. u Stern, O.	Das magnetische Moment des Silberatoms. Zeitschrift fur Physik 9 (1922) 353.

From
Anne Bross
704 Prospect Ave.
South Pasadena, Cal.

SOUTH PASADENA, CALIF.
NOV 16
6 30 PM
1944

Prof. Dr. Otto Stern

Carnegie Institute of
Technology

21. XI

Pittsburgh, Pa.

The very great failure of the rigorous thermodynamic inequality to impose any useful restriction on numerical magnitudes cannot help but increase our conviction that it is legitimate to neglect the irreversible aspects of the process, and that Kelvin's relation is justified. It is to be remembered, furthermore, that we would be able by proper choice of the dimensions of the circuit to get rid of either irreversible Joulean heat or thermal conduction taken by itself. It is only because both are present simultaneously that we are in difficulty. In most other cases there is only one irreversible process that has to be made vanishingly small, as for example conduction loss due to a finite temperature difference between source and recipient. The point of view is therefore to a certain extent a most natural one that the fact that we are here concerned with two intrinsically irreversible processes which are so connected that they cannot both be made to vanish simultaneously is more or less fortuitous. The early conviction of Kelvin, however, that the irreversible aspects could be neglected because there was no necessary connection between the mechanisms of thermal and electrical conduction and thermo-electricity had to be given up with the advent of electron theories of metals and the recognition that the electrons were primarily responsible for all three phenomena. It is therefore of great interest that it has proved to be one of the easiest tasks of the

electron theory of metals to reproduce Kelvin's thermodynamic relations, in spite of failure to reproduce satisfactorily other important aspects of the experimental situation. This has again led to the apparently widespread conviction that Kelvin's relations are all right.

It seems, therefore, that it is not inconceivable that there might be some way of rephrasing the argument of Kelvin which would justify neglect of the irreversible aspects, or at least make us a little better satisfied to neglect them. It does prove possible, as a matter of fact, to so rearrange the argument by setting up the circuit in such a way that the irreversible effects are a maximum, instead of so that they are a minimum, as did Boltzmann. Imagine a thermally insulated box into which lead two heavy bars of metal A, which are short circuited inside the box by a short block of metal B, as shown in Figure 10. The whole system is initially at constant temperature. Electric current is now led into and out of the box through the external leads of A. We imagine this current delivered by a perfectly efficient dynamo with windings made of the metal A. The entire external circuit is then of one metal, and by hypothesis at constant temperature, so that there are no external heating effects. Passage of the current across the junctions A to B is accompanied by a positive Peltier heat at one junction and a negative heat at the other; one junction will rise in temperature and the other fall. The difference of temperature thus generated between the junctions will be accompanied by a thermal conduction current through B, whose magnitude depends on the temperature difference. The temperature difference between the junctions will obviously rise until the thermal conduction exactly accounts for the Peltier heats at the junctions. There will of course also be conduction from the junctions into the rods A, but as time goes on the quantity of heat escaping in this way becomes vanishingly small in comparison with that conducted directly across B, provided the rods are made long enough. A quasi-steady state is therefore reached, in which the Peltier heats are dissipated in the thermal conduction current across B. Let the final temperature difference between the junctions be $\Delta\tau$, and the current i. The heat iP_{AB} passes by conduction in unit time down a temperature drop $\Delta\tau$. If an ordinary thermal conduction current passes from τ to $\tau - \Delta\tau$, the increase of entropy accompanying passage of amount of heat Q is

$$Q\frac{\Delta\tau}{\tau^2}\Big\{ = Q\left(\frac{1}{\tau - \Delta\tau} - \frac{1}{\tau}\right)\Big\}.$$

We now introduce the hypothesis that thermal conduction is an essentially irreversible process, always accompanied by its characteristic increase of entropy, whether or not the conduction is accompanied by other processes. This means that in the case of our thermo-couple entropy is increasing, because of irreversible thermal conduction, by the amount $iP_{AB}\frac{\Delta\tau}{\tau^2}$ per unit time. This increase of entropy must manifest itself in a rise of temperature of the material inside the box, there being no other possibility. The whole box is therefore slowly rising in temperature, carrying with it the temperature difference $\Delta\tau$ between the junctions. The

This is from the proof of my forthcoming book. Please read this first. P.W. Bridgman

origin of this rise of temperature is obviously in the neighborhood of the block B, there being no other place. The conduction loss to the outside because of this rise of temperature vanishes if the rods A are made long enough. The rise of temperature of the entire contents of the box is evidently produced by the energy fed into the box by the source of the current, the energy so fed in being entirely converted into thermal effects within the box, since no mechanical work is involved. The energy delivered by the current to the box is $i\frac{dE_{AB}}{d\tau}\Delta\tau$, where $\frac{dE_{AB}}{d\tau}\Delta\tau$ is the E.M.F. of a couple constituted of metals A and B with junctions at temperature difference $\Delta\tau$. This energy appears as heat at temperature τ, increasing entropy by $\frac{1}{\tau}\left[i\frac{dE_{AB}}{d\tau}\Delta\tau\right]$. Equating the two entropy changes gives

$$i\frac{P_{AB}}{\tau^2}\Delta\tau = i\frac{\Delta\tau}{\tau}\frac{dE_{AB}}{d\tau}.$$

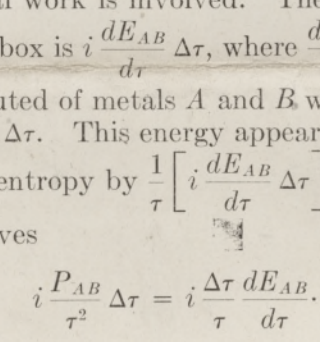
Whence:

$$\tau\frac{dE_{AB}}{d\tau} = P_{AB}.$$

This is the first of Kelvin's relations; the second follows at once from the first law of thermodynamics, which is certainly applicable whether there is or not irreversibility.

In this argument we have neglected the Thomson heat and the Joulean resistance heating. The effect of the Thomson heat is of a different order, for the total Thomson heat developed in B is $i\sigma_B\Delta\tau$. This escapes by conduction through a temperature difference less on the average than $\Delta\tau$, so that the increase of entropy associated with the Thomson heat in the metal B is less than $i\sigma_B\frac{(\Delta\tau)^2}{\tau^2}$, which is thus of a lower order than the increase due to the Peltier heat. The situation with respect to the Thomson heat in A is of course similar. The effect of the Joulean heat exactly adds to the effect already considered, and leaves the final result unchanged. If the resistance of the circuit is R, the Joulean heat is i^2R, and the resulting increase of entropy $\frac{i^2R}{\tau}$. But the input E.M.F. must now be greater than before by iR, so that the input energy is greater by i^2R, and the associated entropy increase $\frac{i^2R}{\tau}$ exactly cancels the amount just found. By putting the argument in this form the fact that there are two irreversible processes taking place simultaneously introduces no complication.

It cannot be claimed that this is a rigorous deduction of Kelvin's relations using only classical thermodynamics. The hypothesis that the irreversible process of heat conduction and Joulean heating are always accompanied by the same characteristic increase of entropy whether or not accompanied by other processes must be recognized to be a new hypothesis, going beyond any explicit formulation to be found in classical thermodynamics. The new hypothesis seems to be a most natural one, certainly not opposed in spirit to classical thermodynamics, and quite consistent with statistical pictures of the nature of entropy. In fact, the new hypothesis may be usefully used in attacking problems



which can also be treated by classical methods, and the fact that it has not been previously explicitly enunciated appears to be more or less accidental. My ideas on this subject have not been accepted by Kennard, however, who sees in thermo-electric phenomena very strong analogies with phenomena of thermal transpiration in gases, which certainly have unremovable irreversible aspects. It appears to me that this analogy might justify one in repudiating the fundamental experimental assumption that Peltier and Thomson heats are *completely* reversible, and in seeking experimentally for effects involving imperfect reversibility. This I feel to be an entirely defensible position, but, granted the reversibility, which was fundamental to the argument, I still feel that the considerations above are very plausible. The matter has been discussed in print,[5] and the reader may form his own opinion.

JAMES BRINN
METALLURGIST
~~7038 WEST 35TH STREET~~
~~BERWYN, ILL.~~
1454 Washington
Lincoln . Nebr.

LINCOLN
JAN 28
8 PM
1945
NEBR.

Silberstein

Prof. Otto Stern
Carnegie Institute of Technology
Pittsburgh. Pa.

L. B.

COLUMBIA UNIVERSITY
DIVISION OF WAR RESEARCH
APPLIED MATHEMATICS GROUP
401 WEST 118TH STREET
NEW YORK 27, N. Y.

NEW YORK N.Y. NOV 10 7-PM 1944

STA

WIN THE WAR
3¢ 3¢
UNITED STATES POSTAGE

21. XI

Brillouin

To Prof O. Stern
Carnegie Tech.
Pittsburgh Pa.

1454 Washington Ave
Lincoln. Nebr.
Jan. 28. 1945.

Sehr geehrter Herr Professor:

Sie werden sich meiner wohl nicht mehr erinnern. Ich kam aus Schweden nach Frankfurt a/M in 1919 und studierte unter Prof. Lorenz und Fraenckel und habe dabei auch Sie kennen gelernt. In 1923 kam ich hierher und bin seitdem hier in diesem Lande.

Ich möchte vor Allem Ihnen herzlichst zu dem Nobelpreis gratulieren und hoffe dass Sie in diesem Lande noch viele weitere Erfolge haben werden.

Auch hoffe ich dass Sie sich hier schon eingelebt haben oder bald einleben werden; es ist hier vieles nicht so wie drüben, und je weiter West man kommt, desto mehr merkt man den Unterschied.

2

Ich möchte gern Prof Walter Fraenckel (Frankfurt a/M 1919-?) und Prof F. Hahn (Analytische Chemie. Frankfurt a/M 1922?-) schreiben; falls sie hier in diesem Lande sind; könnten Sie mir ihre Adressen vielleicht geben?

Mit den besten Grüssen

Ihr ergebener

James Brinn

P.S. Sie hatten mich unter den Namen Silberstein kennen gelernt; als ich amerikanischer Bürger wurde habe ich meinen Namen geändert

D. S.

L. Brillouin
88 Central Park West
New. York 23

Trafalgar 4. 6576

Nov. 10. 44

Dear Friend

Hurrah for your Nobel prize ! I certainly was delighted when I saw your name again on the paper this morning. Are you never coming to N York ? If so, don't miss to call me up.

Very sincerely

L Brillouin

There are better restaurants in N. York than in Pittsburgh, for one who knows !

DR. OTTO BRILL

Arequipa (Perú), CASILLA 396

21 - XII - 1944.

Dear Mr. Stern!

When I learned about you having been honored by the Nobel prize together with Rabi, I sent you my congratulations by means of my sister in New York, Mrs. I. Tyson, as I did not know your address. Just now I got it, and I want to felicitate you to the big success and the public acknowledgment of your method of the investigation of the property of molecules + atoms. From the few news I got, I could not make out, what actually research is responsible for your distinction.

As you see from my adress, I am now in South America, since 1937 working as a analytic chemist in the big mineral firm of Mauricio Hochschild, and I am here the chief of the lab. of the branch here. In the meantime I learned a lot of mineralogy and ore dressing besides my analytic work, but still I am more interested in labor. and research work than in managing a mine. But for research there are no possibilities here for lack of material and specially of literature. Since I have come here to South America my only informations are the few chemical journals I suscribed. So I ignore what happens in the scientific world. I hope when war is over, that I can make a trip to the U.S. to learn about the newest developments and to get up to date.

May I ask you a favor? Possibly I will get here the apointment at the university here for lecturing analytic chemistry. And I would be glad if I could refer to your work for my introduction class. But as I told you, I don't know what happened, since you came to the U.S. If it would not make too much trouble for you to tell me, where I can get the respective informations about your and Rabi's work?

With my best wishes for you and further successes

I remain yours truly

Otto Brill.

South Pasadena, Cal. 11/16/44
704 Prospect Ave.

Dear Professor Stern,

I do not know whether you remember us. Three years ago we celebrated Thanksgiving at the house of our good friends, the Estermanns. So much for introduction.

We learned the other day from the Los Angeles Times that the Nobel Prize has been awarded to you. We were really proud and thrilled and wish to convey to you our heartiest congratulations and our best wishes for the future.

Sincerely yours,
Liselotte, Arno and
Evelyne Boss

TWINKLE, TWINKLE OTTO STERN

Twinkle, twinkle Otto Stern
How did Rabi so much learn?
He rose in the world so high
Like a diamond in the sky.
Twinkle, twinkle Otto Stern
How did Rabi so much learn?

The infant cried when he was born:
In Austria I feel forlorn.
And he said: The stupid stork
Should have brought me to New York
Twinkle, twinkle Otto Stern
How did Rabi so much learn?

He crossed the sea as baby small
But that didn't hurt at all.
Great was his intelligence
In a certain narrow sense.
Twinkle, twinkle Otto Stern
How did Rabi so much learn?

Talmud and philosophie
Didn't really satisfy.
So he thought as physicist
He perhaps would not be missed.
Twinkle, twinkle Otto Stern
How did Rabi so much learn?

He together with his team
Wiggled the atomic beam
Up and down through slits so fine
Saw the light of reason shine.
Twinkle, twinkle Otto Stern
How did Rabi so much learn?

Soon the moments made him worry
And he said: I'm awfully sorry.
Gentlemen, we have no chance,
What we need is resonance.
Twinkle, twinkle Otto Stern
How did Rabi so much learn?

Well, you know, he's always right,
This time he was even bright,
And a quadrupole he found.
Deuterons were no more round.
Twinkle, twinkle Otto Stern
How did Rabi so much learn?

At R. L. he said: Why not
Should I be a great big shot?
And again he was quite right
He almost made it, but not quite.
Twinkle, twinkle Otto Stern
Ho did Rabi so much learn?

So he finally grew wise
Got himself the Nobelprize.
Back to physics now he is
With undreamt possibilities.
Twinkle, twinkle Otto Stern
How did Rabi so much learn?

Twinkle, twinkle Otto Stern
How did Rabi so much learn?
He rose in the world so high
Like a diamond in the sky.
Twinkle, twinkle Otto Stern
How did Rabi so much learn?

<u>Twinkle, twinkle Otto Stern.</u>

1) Twinkle, twinkle Otto Stern
How did Rabi so much learn?
He rose in the world so high
Like a diamond in the sky.
Twinkle, twinkle Otto Stern
How did Rabi so much learn?

2) The infant cried when he was born:
In Austria I feel forlorn.
And he said: The stupid stork
Should have brought me to New York.
Twinkle etc.

3) He crossed the sea as baby small
But that did'nt hurt at all.
Great was his intelligence
In a certain narrow sense.
Twinkle etc.

4) Talmud and philosophie
Did'nt really satisfy.
So he thought as physicist
He perhaps would not be missed.
Twinkle etc.

5) He together with his team
Wiggled the atomic beam
Up and down through slits so fine
Saw the light of reason shine.
Twinkle etc.

6) Soon the moments made him worry
And he said: I'm awfully sorry.
Gentlemen, we have no chance,
What we need is resonance.
Twinkle etc.

7) Well, you know, he's always right,
This time he was even bright.
And a quadrupole he found.
Deuterons were no more round.
Twinkle etc.

8) At R.L. he said: Why not
Should I be a great big shot?
And again he was quite right
He almost made it, but not quite.
Twinkle etc.

9) So he finally grew wise
Got himself the Nobelprize.
Back to physics now he is
With undreamt possibilities.
Twinkle etc.

10) = 1).

Lore C. Bloch

Entstanden anlässlich einer Feier bei den Rabi's bei der wir alle an Sie dachten.
Viele herzliche Glückwünsche F. Bloch
Auch von mir die herzlichsten Glückwünsche Lore Bloch.

I. I. Rabi
George E. Uhlenbeck
Felix Bloch.
Jerrold Zacharias.
Peg Turner
Wheeler Loomis.
Milton G. White
Gretchen Ridenour
Lee A. DuBridge
J H Van Vleck
Louis N. Ridenour
Carl [illegible] Montgomery
L. J. Haworth
J B Horner Kuper
Lucile Marshall
E. M. Purcell
James L. Lawson
Jane K. Lawson
Beth Purcell
Louis A. Turner
Edith Loomis
Annette Kuper
[illegible]
Helen Rabi
John C. Slater
[illegible]

Dr. BERNHARD BLUMENTHAL
58 MADISON AVENUE
PERTH AMBOY, NEW JERSEY

PERTH AMBOY, N. J.
NOV 14
12 30 PM
1944

Dr. Otto Stern
Morewood Gardens
Morewood Avenue
Pittsburgh, Pa.

21. II

DR. BERNHARD BLUMENTHAL
58 MADISON AVENUE
PERTH AMBOY, NEW JERSEY

Hochverehrter Herr Herr!

Es geschieht nur ganz selten dass mir der gewöhnlichen Sterblichen Gelegenheit hat, einem mit dem Nobel-preis Ausgezeichneten aus Anlass dieser grossen Ehrung meine Glückwünsche zu übermitteln. Der innere Kreis der Physiker wusste auch ohne diese Anerkennung was Sie geleistet haben. Dass Sie nun auch offiziell in den Kreis der ganz Grossen aufgenommen worden sind, und dass Sie die höchste Auszeichnung die einem Wissenschaftler zuteil werden kann, erhalten haben, ist uns eine besondere Freude und Genugtuung. Es ist eine Auszeichnung der höchsten menschlichen Werte, die hier in den Vereinigten Staaten einen neuen Boden

zum Keimen und Wachsen gefunden haben, und es ist die Verwesung des moralischen und geistigen Trümmerhaufens von heute, das einst Deutschland war.

Mögen Ihnen noch viele gesunde Jahre fruchtbarer Arbeit beschieden sein!

Mit den herzlichsten Grüssen für Sie und Ihre Schwester

Ihre

Frieda und Bernard Blumenthal.

5800 Munhall Road
Pittsburgh 17, Nov. 10-44

Sehr geehrter Herr Professor Stern.

Die grosse Ehre, die Ihnen mit der Verleihung des Nobel Preises widerfahren ist, veranlasst mich Ihnen die herzlichsten Glückwünsche auszusprechen. Schreiber ist einer, der hier Heimat und etwas Frieden gefunden hat, und ich glaube im Namen der Neueinwanderer zu sprechen, wenn ich auch nicht Auftrag habe, dass wir uns alle geehrt fühlen, dass Sie der grossen Auszeichnung für würdig befunden worden sind und dass Sie in Ihrer grossen Bescheidenheit der Welt, soweit sie anständig ist und nicht nazifiziert ist, zeigen konnten, welch' ein Segen Neukommer zu ihrer neuen Umgebung sein können.

Mit freundlichsten Wünschen für Ihr weiteres Wohlergehen, verbleibe ich einer Ihrer Bewunderer.

H. Birnbaum.

November 21, 1944

Professor R. T. Birge
Department of Physics
University of California
Berkeley, California.

Dear Professor Birge:

Thank you very much for your kind letter of congratulation.

You know how much I like Berkeley. However, in the matter of retirement, the Nobel Prize will have some influence, but unfortunately in the wrong direction. It would not look right if I would retire just after receiving the prize.

I expect, however, to spend the next summer in Berkeley on account of my health, and am looking forward to seeing you and all my old friends.

Very sincerely,

O. Stern

UNIVERSITY OF CALIFORNIA

DEPARTMENT OF PHYSICS
BERKELEY, CALIFORNIA

November 11, 1944

Professor Otto Stern
Carnegie Institute of Technology
Pittsburgh, Pennsylvania

Dear Professor Stern:

Since the telegraph company is not supposed to accept telegrams of congratulation, I will content myself with a letter.

I think you know that in past times, when Dr. Campbell was President of the University and we were asked each year to suggest nominations for the Nobel Prize, we always sent in your name. Hence you can see that we are quite satisfied with the final result, although I presume that this final result is not in any way due to our efforts. You certainly deserve it and I am more than pleased to learn of the award.

My first knowledge of this matter came over the telephone Thursday evening from the San Francisco Chronicle. They had just gotten over the wire a dispatch saying that a Nobel Prize in Physics had been awarded to a Mr. Isaac Stern for something about the magnetism of the "prontrums". The editor wanted to know what "prontrums" were and I had to confess that I did not know any more about them than he did. I told him that there was a Mr. Otto Stern and probably the dispatch referred to him, but we decided to wait for further clarification. Then, about half an hour later, I heard over the regular news broadcast a correct statement of the two awards to you and to Professor Rabi.

According to the Berkeley Gazette last night, you are intending to live in Berkeley on your retirement. We are, of course, also glad to hear that, and I would be interested to know just when the retirement is to occur. Possibly the award of the Nobel Prize will have some influence on that metter.

Again congratulating you on this well deserved honor, I am

Yours sincerely,

Raymond T. Birge

RTB:Y
Via air-mail

11. November. 44.

Bester Herr Kollege Stern!

Ich freue mich aufrichtigst, daß Ihr vortreffliches Werk mit der Verleihung des Nobelpreises ausgezeichnet wurde. Empfangen Sie meine herzlichsten Wünsche. Ich wollte sie telegrafisch übermitteln, aber das Telegram wurde zurückgewiesen. – Ich bin Donnerstag wieder in P. und werde

meine Wünsche mündlich
wiederholen.

Beste Grüsse

E. Ver[illegible]

Nov. 8. 44

Geehrter Professor Stern!

Soeben lese ich in der Zeitung von der großen Ehrung, die Ihnen zuteil geworden ist.

Nehmen Sie meine aufrichtigsten Glückwünsche entgegen zur Verleihung des Nobelpreises.

Mein Mann ist verreist, dies erklärt, warum seine Gratulation Sie erst später erreichen wird.

Mit besten Grüßen

Margarete Berl

ALFRED BERGMAN
80 BROAD STREET
NEW YORK, N. Y.

HANOVER 2-0590

24 November 1944

Dr. Otto Stern
Carnegie Institute
Pittsburgh, Pennsylvania

Dear Dr. Stern:

I want to congratulate you on receiving the Nobel Prize. All I can say is that you are certainly deserving of it.

With kindest regards, I am,

Sincerely,

Alfred Bergman

ALFRED BERGMAN

OBSERVATORIO ASTRONÓMICO
DE LA
NACIÓN ARGENTINA

CORDOBA, 22-11-1944

My dear Professor Stern:

Having just read the welcome news that you have been awarded the Nobel price 1943 I want to congratulate you very heartily for the high international distinction which honours not only your personal work, but the whole branch of investigation which you have so successfully initiated.

Believe me to be, my dear Professor Stern,

very sincerely yours

Guido Beck.

ROUSS PHYSICAL LABORATORY
UNIVERSITY OF VIRGINIA
UNIVERSITY STATION
CHARLOTTESVILLE, VIRGINIA

November 13, 1944

Professor Otto Stern
Carnegie Institute of Technology
Pittsburgh, Pennsylvania

Dear Professor Stern:

I have just seen a newspaper account of your receiving the Nobel prize and want to extend my best congratulations. You have richly deserved this great honor for many years and it is good news that it has now been awarded to you.

With best regards, I am

Sincerely,

J. W. Beams

JWB:agl

MEMORANDUM

CARNEGIE INSTITUTE OF TECHNOLOGY
PITTSBURGH 13, PENNSYLVANIA

METALS RESEARCH LABORATORY

To: Dr. Stern

Subject: Congratulations !

Charles S. Barrett

Nov 10 1944

CALIFORNIA INSTITUTE OF TECHNOLOGY
PASADENA

NORMAN BRIDGE LABORATORY OF PHYSICS

December 19, 1944

Professor Otto Stern,
Carnegie Institute of Technology,
Pittsburgh, Pennsylvania.

Dear Professor Stern:

I was much pleased to learn a little while ago that you had received a Nobel prize in Physics. You have my best congratulations. For many years I have thought you ought to have one. Indeed, as I recalled it, the first time I had the honor of being invited to make nominations for the Nobel prize - more than twenty years ago - I nominated you and Gerlach. I suspect strongly that usually* Justice finally arrives, even if she is sometimes slow.

This letter would have been written earlier but for the fact that in recent weeks I have been terribly rushed with changing my residence from Westwood to Pasadena. At the end of June, I was retired in accord with the inexorable law at the University of California. This left me free to devote much more of my time to my researches over here - where I do <u>not</u> retire; the time consumed in the travel and the expense involved, and the fact that we can live less expensively here than in Westwood (important now that my income is very greatly reduced) made the change imperative. I still maintain an office at the University as Professor Emeritus, but can be here now more of the time.

I hope that we shall see you here again before very long. Of course, things are very badly upset by the war; but it will come to and end bye and bye.

Sincerely yours,

S. J. Barnett

S. J. Barnett

SJB:ahw

* I think always either in this world or the next!