

A dream in waiting

The first two decades of the IUPAP

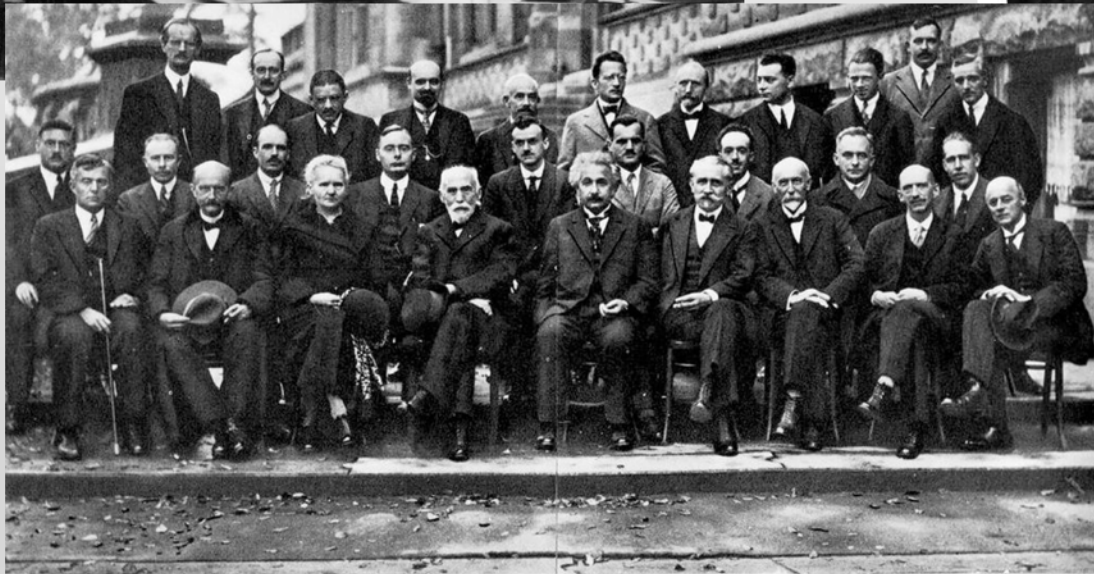
Jaume Navarro

Ikerbasque and University of the Basque Country



INSTITUT INTERNATIONAL DE PHYSIQUE SOLVAY

SEPTIÈME CONSEIL DE PHYSIQUE -- BRUXELLES. 22-29 OCTOBRE 1933



Photographie Benjamin Couprie

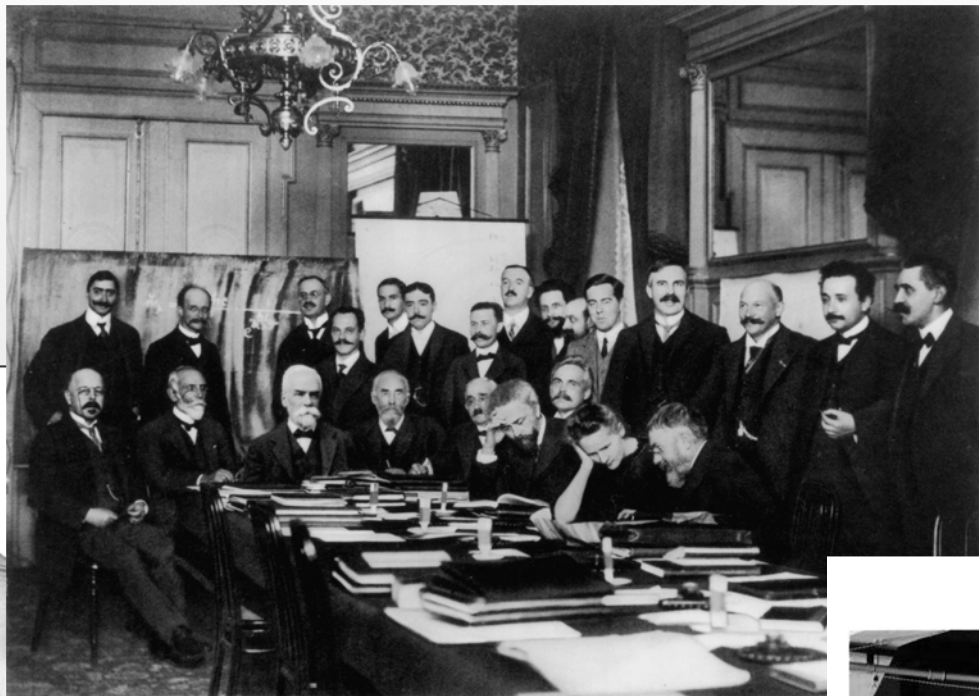
28, Avenue Louise, Bruxelles

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 P. DEBYE M. KNUDSEN W. L. BRAGG H. A. KRAMERS P. A. M. DIRAC A. H. COMPTON L. V. DE BROGLIE M. BORN N. BOHR
 I. LANGMEIR M. PLANCK MADAME CURIE H. A. LORENTZ A. EINSTEIN P. LANGEVIN CH. E. GUYE C. T. R. WILSON
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 F. JOLIOT W. HEISENBERG E. T. S. WALTON P. DEBYE B. CABRERA W. BOTHE Ed. BAUER J. E. VERSCHAFFELT J. D. COCKROFT L. ROSENFELD
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 P. LANGEVIN Th. DE DONDER L. de BROGLIE
 Absents : A. EINSTEIN et Ch.-Eug. GUYE





Photographie Benjamin Coupre 28, Avenue Louise, Bruxelles

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Caltech



International Research Council (1919)

- Emile Picard (President)
- Arthur Schuster (General Secretary)
- George Ellery Halle (VP)
- Georges Lecoq (VP)
- Vito Volterra (VP)



International Research Council (1919)

- The International Astronomical Union (IAU)
- The International Union of Geodesy and Geophysics (IUGG)
- The International Union of Pure and Applied Chemistry (IUPAC)

- The International Union of Biological Sciences (IUBS)
- The International Union of Radio Science (URSI)

A Union of Physical Sciences in 1919?

Ap. 9.208

INTERNATIONAL RESEARCH COUNCIL.

CONSTITUTIVE ASSEMBLY

HELD AT
BRUSSELS,

ANNULÉ

JULY 15TH TO JULY 23TH, 1919.

REPORTS OF PROCEEDINGS

EDITED BY

SIR ARTHUR SCHUSTER, F.R.S.,

GENERAL SECRETARY.



LONDON:
HARRISON & SONS,
Printers in Ordinary to His Majesty,
ST. MARTIN'S LANE, W.C. 2.

APRIL, 1920.

Price Ten Shillings and Sixpence

ANNULÉ

ANNEXE 28.

E.

PROPOSED STATUTES

FOR AN

INTERNATIONAL UNION OF PHYSICAL SCIENCES.

I.—OBJECTS OF THE UNION AND CONDITIONS OF ADMISSION.

1. The purpose of the Union is :—
 - (1) To initiate and promote international co-operation in Physics.
 - (2) To co-ordinate efforts in the preparation and publication of abstracts of papers and tables of physical constants.
 - (3) To establish international agreements on questions of units, standardization, nomenclature, and notation.
 - (4) To promote interesting researches.
 - (5) To organize International Congresses or General Conferences.
2. The admission of countries to the Union shall be subject to the conditions fixed by the International Research Council.

II.—NATIONAL COMMITTEES.

3. A National Committee shall be formed in each of the countries belonging to the Union. It shall be formed under the responsibility of the principal academy of the country concerned, or of its National Research Council, or of some other national institution or association of institutions, or of its Government.
4. The functions of the National Committees shall be to promote and co-ordinate, in their respective countries, the study of the various branches of Physics, more especially in relation to their international requirements. Each National Committee may by itself, or jointly with others, propose questions falling within the purview of the Union for discussion by the Union. The National Committees shall appoint delegates to represent them at the meetings of the Union.

Creation of the IUPAP, 1922-1923

- July 1922, at the GA of the IRC in Brussels, an “executive committee” with:
 - William Bragg (President), Henri Abraham (General Secretary), M. Brillouin, O. M. Corbino, M. Knudsen, M. Leblanc, H. A. Lorentz, R. Millikan, H. Nagaoka, E. van Aobel.
- 10 December 1923. First, “constitutive” General Assembly of IUPAP in Paris:
 - Approval of statutes
 - Countries (13 + 3): Belgium, Canada, Denmark, France, Holland, Japan, Norway, Poland, Spain, Switzerland, UK, USA, South Africa, [Italy, Sweden, Czechoslovakia]

UNION INTERNATIONALE
DE PHYSIQUE
PURE & APPLIQUÉE

ASSEMBLÉE GÉNÉRALE CONSTITUTIVE
PARIS — DÉCEMBRE 1923

PROCÈS-VERBAL

Séance de l'Assemblée Générale

Après une réunion du bureau à 10 h. 30, la séance de l'Assemblée générale est ouverte à 11 heures.

1. En l'absence de sir William BRAGG, président du Comité exécutif provisoire, retenu à Londres par ses fonctions, la séance est présidée par M. Marcel BRILLOUIN, vice-président du Comité provisoire.

2. Sur la proposition du Président, l'Assemblée décide, à l'unanimité d'offrir la présidence d'honneur de la séance à MM. LORENTZ et VOLTERRA.

3. Au nom du Comité exécutif de l'Union, le Secrétaire général donne lecture du rapport ci-dessous :

« Messieurs,

« Le Conseil International de Recherches, créé en juillet 1919, a tenu une Assemblée générale en juillet 1922, à Bruxelles. Les physiciens présents à cette réunion ont décidé de provoquer la formation d'une Union Internationale de Physique pure et appliquée dans le cadre général du Conseil International de Recherches. Ils ont constitué un Comité Exécutif composé de : Sir William BRAGG, président, et de MM. Marcel BRILLOUIN, CORBINO, KNUDSEN, Maurice LEBLANC, LORENTZ, MILLIKAN, NAGAKOA, VAN AUBEL, vice-présidents, et ABRAHAM, secrétaire général. Ce Comité a fait des démarches auprès des différents pays ayant adhéré au Conseil des Recherches, en vue de provoquer des adhésions à l'Union Internationale de Physique pure et appliquée. Quatorze de ces nations sont représentées dans l'Assemblée générale actuelle, la plupart ont déjà fait parvenir au Comité exécutif la notification officielle de leur adhésion (1). La présente Assemblée va donc être en mesure de déclarer que l'Union Internationale de Physique pure et appliquée est régulièrement constituée, et adopter des statuts définitifs.

« La réunion de Bruxelles avait envisagé la tenue d'un Congrès de Physique en 1923, à Cambridge. Des difficultés matérielles d'orga-

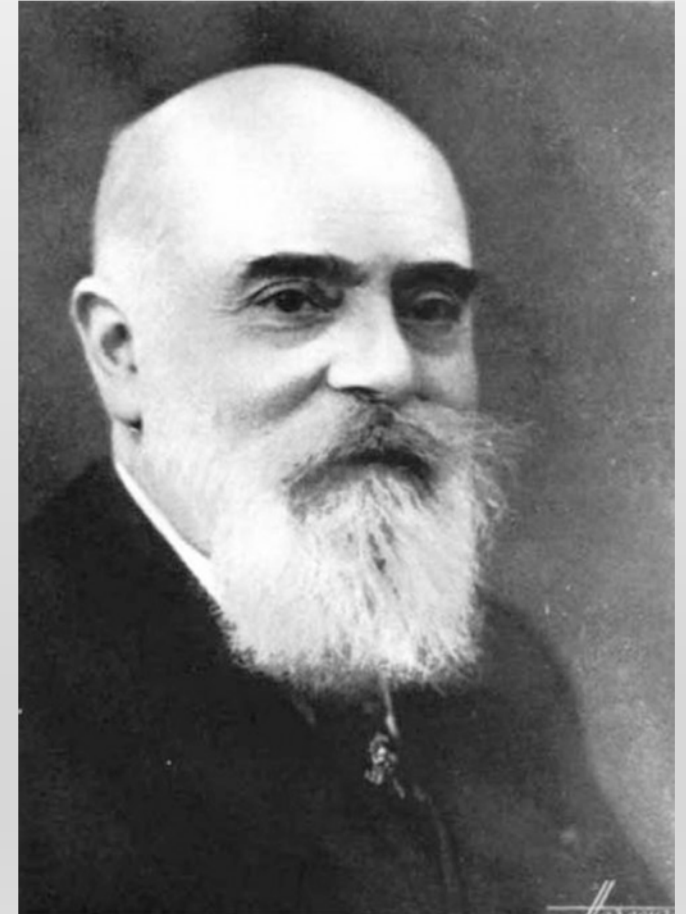
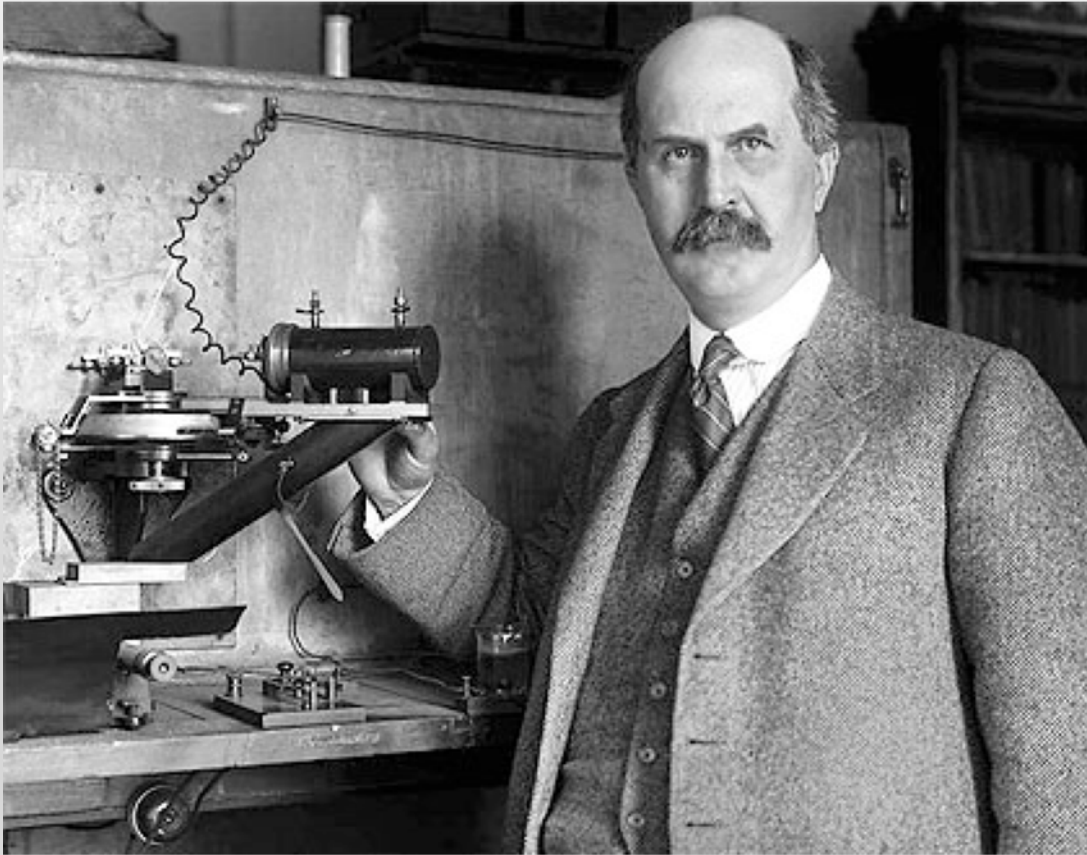
(1) Adhésions officiellement notifiées : Belgique, Canada, Danemark, Espagne, États-Unis, France, Grande-Bretagne, Japon, Norvège, Pays-Bas, Pologne, Suisse, Union sud-Africaine.

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President, William H. Bragg (1862-1942);

General Secretary, Henri Abraham (1869-1943)



1923-1931...

qui lui est confiée, de manière à réaliser une collaboration aussi étroite que possible avec ces organisations.

RAPPORT DE LA COMMISSION DES COMPTES

Paris, le 15 Juin 1931.

Les comptes de l'Union pour la période de 1^{er} Janvier 1925 au 31 Mai 1931 nous ont été soumis par le secrétaire général.

RECETTES	DEPENSES
Cotisations reçues .. 74.866 97	Frais du secrétariat . 4.149 70
Intérêts en banque .. 7.166 83	Frais de déplacement (Londres Paris et retour) et frais de séjour à Paris du représentant de l'U- nion au Conseil In- ternational de Re- cherches en 1930 .. 1.737 10
Total: 82.033 80	Remboursement d'un trop-perçu (Austra- lie) 5.487 65
	Total des dépenses: 11.374 45
	Excédent des recet- tes: 70.659 35
	Total égal aux re- cettes: 82.033 80

(1) Sir Richard GLAZEBROOK a été désigné comme président par ses collègues de la commission.

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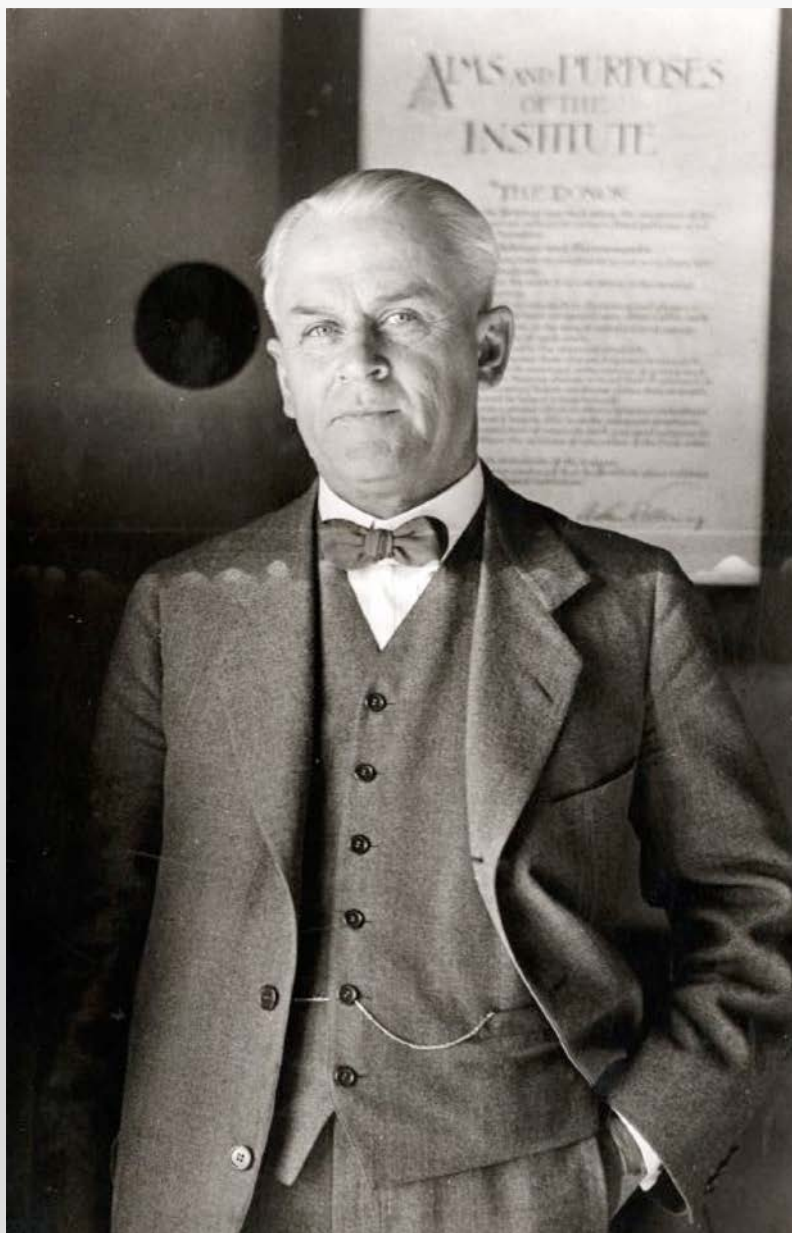
COMPTE DE CAISSE

En caisse au 1 ^{er} Janvier 1925	26.240 40
Excédent des recettes	70.659 35
En caisse au 31 Mai 1931	96.899 75

Nous avons constaté la concordance de ces écritures avec les pièces comptables.

(signé) Ch. Ed. GUILLAUME

P. JANET.



Robert A. Millikan (1868-1953)

- Involved in international science from his position as foreign secretary of the (American) National Academy of Sciences
- Engaged with IUPAP since 1923
- Elected president of the IUPAP on July 10th 1931 (telegram of confirmation)
- 1931: Creation of the Commission on Bibliography and Publications with Cabrera, Cotton, and Langevin; and a Commission on Nomenclature, Units and Symbols, with Glazebrook (president), Fabry, Keesom and A.E. Kennelly.

Millikan to von Laue, 25 Nov 1931

“...this union, of which Bragg has been the president, has been purposely quiescent until it could be made completely international in its membership; and finally, that when assurances came last summer, after conversations between Abraham (Paris) and Planck, Schrödinger and yourself, that the time had come when it could be made fully international, it set about the organization of some active committees”.

Millikan to von Laue, 25 Nov 1931

He goes on that now the two committees (the executive and the standards) “are ready to function actively as soon as the German representation in their membership can be provided for, and they both have important work to do which should not be delayed. Thus the planning for the Chicago meeting is the function of the Executive Committee, and the promoters of the Centenary are planning to make it possible to invite a considerable number of European physicists...”



May 8, 1931

Professor Henri Abraham,
45 Rue Ulm,
Paris, France.

Dear Professor Abraham:

I have just learned that it is going to be entirely impossible for me to attend the meeting of the International Union of Pure and Applied Physics in Brussels on the 9th and 10th of July. Indeed, my duties force me to remain here during the months of July and August. Let me express my gratification, however, that the Union is now becoming properly organized and set into motion. I have no doubt that with yourself and Professor Bragg at the helm the bark will ride smoothly.

I would like to suggest that inasmuch as the Chicago Exposition in the summer of 1933 will unquestionably bring to it a very large number of the world's physicists, it might be a very excellent time for holding a meeting of the International Union. The management of the Exposition has asked the American Association for the Advancement of Science to recommend to it a group of eighty scientists outside of the United States who may be invited to meet with it there in the third week in June, 1933, and read papers, and I think that it was planned to pay at least the traveling expenses of all these invited guests. This would seem to make this time and place, therefore, a very logical one for the meeting of the International Union if it is thought wise to hold a meeting in 1933, and I suggest that the officers consider this matter when they meet on the 9th and 10th of July. I can assure them that the Union would receive an official invitation to meet in Chicago at that time if it looked favorably upon the plan.

Cordially yours,

RAM:IH



August 4, 1933

Professor Henri Abraham
45 rue d'Ulm
Paris

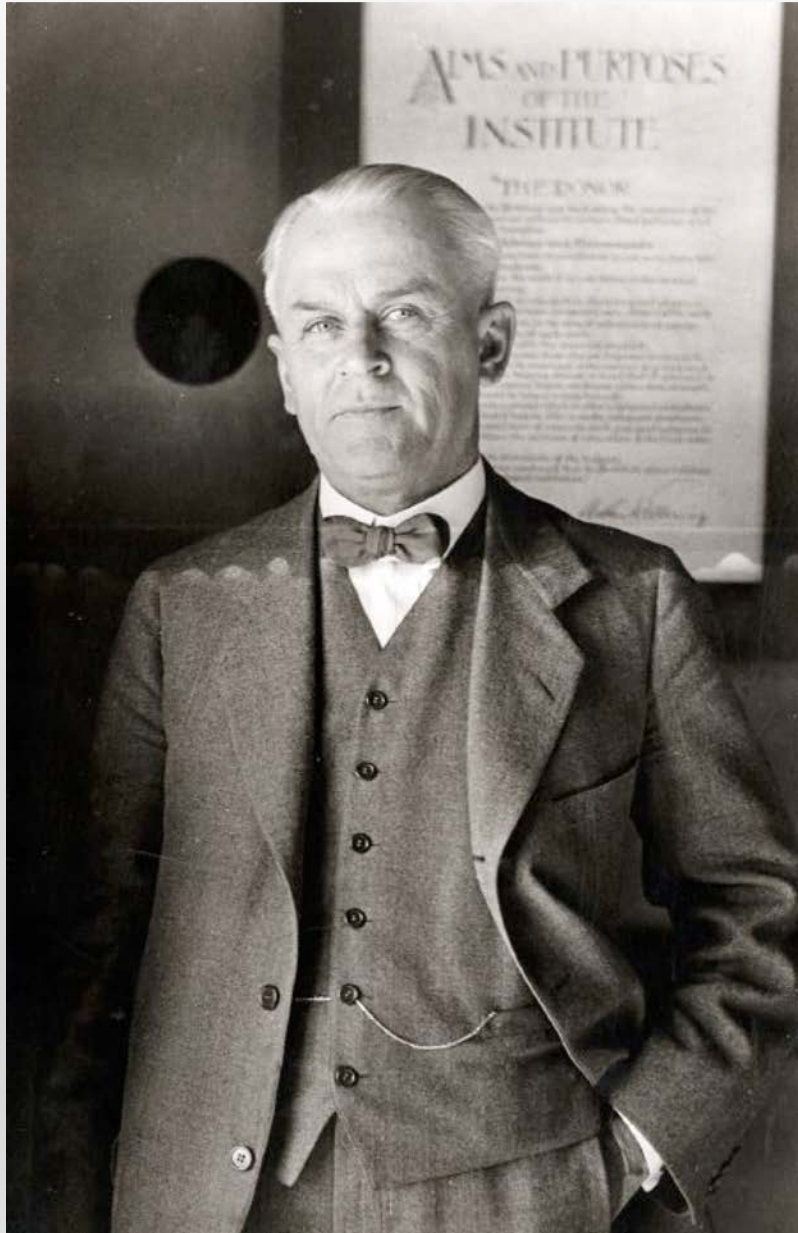
Dear Professor Abraham:

I have not written you since our meeting in Chicago on June 24th. The papers which were sent both by you and by Glazebrook contributed much to the success of the meeting. There was excellent discussion, and on the whole I think something has been accomplished. The complete set of papers is going to be published as a Bulletin of the National Research Council. There were, of course, but few foreigners, as you anticipated.

Professor Vegard spoke to me after the meeting expressing his fear that the Union might disintegrate if it did not soon hold a meeting which would demonstrate that it had both vitality and a real work to perform. I myself see a large amount of useful activity in the field of symbols, units and nomenclature, but I suspect that the most important function of the Union will be the organizing and holding of international congresses, as we started out to do in Chicago, but found we could not do because of the lack of European attendance. Have you and Dr. Glazebrook any ideas with respect to activities of this sort in the near future?

Very cordially yours,

KAM:IH



IUPAP's *Great Depression*

- 1933 Chicago fiasco
- 1933 State Department fiasco
- 1934. London Conference and 4th GA
- Efforts to bring Germans and Italians on board
- Niels Bohr election as president... fiasco.

London and Cambridge, October 1934



International Conference on Physics.
London, 1934.

London, England
1934

Widdowson Darwin
Potter
Hylleraas
Heisenberg
Bohr
Stern
Lorentz
Cabrera
Bjerknes
McComan
Schwinger
Hendee
Minkowski
Gross
Landau
Mott
Teller
Compton
Fowler
Ridgway
Fermi
Klein
Kramers
Si. Brass
Feynman
Russett
Oppenheimer
Crosman
Blackett
Bernal
Bainbrigg
Wicks
Plesch
T. H. Morgan

Oct. 1934.

'PHONE 1259.
GUESTS 2380.

GARDEN HOUSE HOTEL,

BELLE VUE,

CAMBRIDGE.

A.A.
R.A.C.

Dr. Millikan

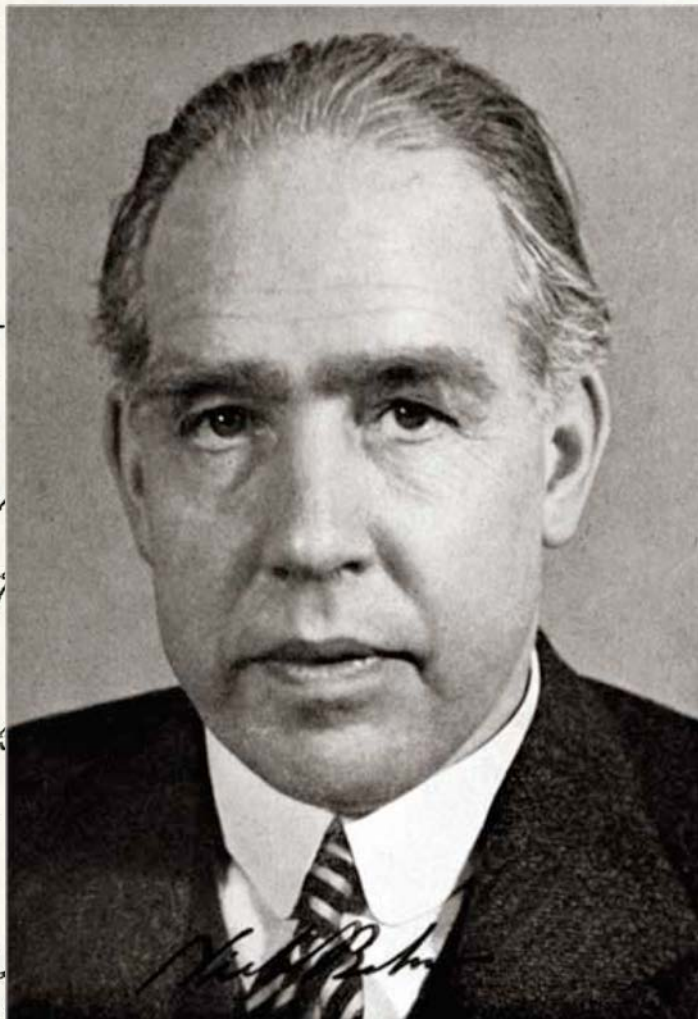
Dear Abraham

I called Bohr on Saturday telling ^{him} we had "had a most distinguished Congress the climax of which was the election of Bohr as president. To day I have a reply reading

"Please extend hearty thanks to Congress for great honor." Bohr

So, thanks to yourself and Sir Richard Glazebrook The Union is now "well on its way, with flying sails" Congratulations!! I hope our German troubles too will

Niels Bohr, 1934



UNIVERSITETS INSTITUT
FOR
TEORETISK FYSIK

R. 19.

BLEGDAMSVEJ 15, KØBENHAVN Ø.

34

DEN 12. Decembre 1934.

Monsieur le Secrétaire et cher Collègue,

Je vous remercie vivement pour votre aimable lettre et les intéressants renseignements qu'elle contenait au sujet de vos efforts pour obtenir une participation universelle à l'Union de physique. Quoique je le sache déjà, j'ai été très heureux de me sentir, à la lecture de votre lettre, en complet accord avec vous au sujet du but à atteindre et je vous suis très reconnaissant pour votre aimable interprétation de l'élection de Londres.

L'attitude de principe que j'ai prise dans la discussion au cours de ses nombreux stades depuis la création du Conseil de Recherches m'empêche toutefois d'accepter d'être rattaché officiellement à l'activité de l'Union de la manière qu'on m'a fait le grand honneur de m'offrir, avant que l'adhésion universelle à l'Union, que nous désirons tous, soit effectivement réalisée. Après avoir bien considéré la question sous tous ses aspects, je me vois donc obligé, à mon grand regret, de maintenir ma décision.

Je désirerais ajouter que le fait de ne pas être rattaché officiellement à la direction de l'Union pour la période actuelle ne pourra que faciliter ma participation à de nouveaux efforts pour amener dans un avenir prochain une adhésion universelle aux travaux de l'Union. A ce propos je désirerais vous demander votre assentiment pour informer de notre correspondance mes amis intimes Lord Rutherford et les Professeurs Langevin et Planck, de manière à pouvoir discuter avec eux des mesures inofficielles les mieux à même de concourir au but désiré.

Veillez agréer, Monsieur le Secrétaire et cher Collègue, l'expression de mes sentiments les plus distingués.

Niels Bohr

Who was the president of IUPAP between 1934 and 1937? Robert Millikan, Niels Bohr, Enrico Fermi or Manne Siegbahn?

March 23, 1937

Professor Henri Abraham
Union Internationale de Physique Pure et Appliquée
45, rue d'Ulm
Paris (Ve), France

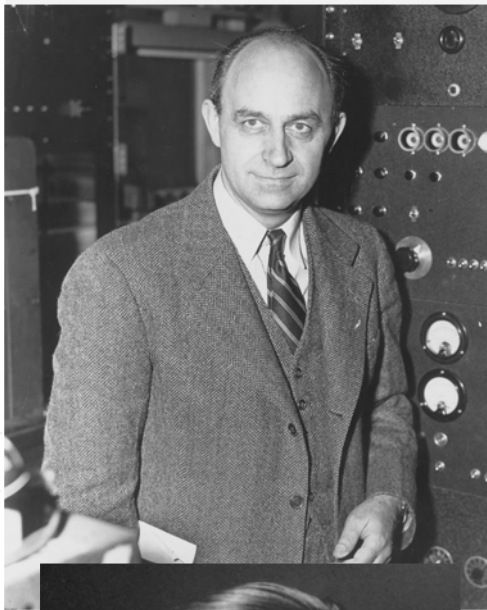
Dear Professor Abraham:

I have just had a long talk with Bohr about the International Union of Pure and Applied Physics, as I told you I had hoped to do. His attitude seems to be altogether good, his reason for feeling that he ought not to act at this moment as the President of the International Union being wholly due to what he considers to be the demands of 'diplomacy'. Having insisted, as he says he has done, that the International Union must become as soon as possible international, he feels that while the Germans are so non-internationally minded as they are at present, especially in view of the complexities of the Hitler regime, that it would be more diplomatic to have Fermi act officially as President. He is, however, thoroughly in accord with the idea that the International Union meet in Copenhagen jointly with the Danish Academy, Fermi presiding as President of the Union and he as President of the Danish Academy, and he supposes that you have agreed in principle to this sort of a plan and have got Fermi also to accede to it. In this case my conference with him was of course not a necessary matter, but I am merely writing to you for the sake of telling you that we have had some conversation about the matter. I do not understand from Dr. Bohr's comments that there is anything further that I need to do, or for that matter can do.

I may be in Paris about June 15th, but I am not altogether certain of that and if so I will get in touch with you. I sail on the Britannic from New York on May 1st to give some lectures under the Scandinavian-American Foundation.

Very sincerely yours,

RAM:IH



UNION INTERNATIONALE DE PHYSIQUE PURE ET APPLIQUÉE

SECRETARIAT GÉNÉRAL:
45, RUE D'ULM, 45
PARIS (V^e)

TÉL. ODÉON 06-45
15-94

Paris, le 27 Août 1937

Mon cher ami

Notre éminent collègue Monsieur Enrico Fermi, actuellement aux États-Unis, vient de me faire parvenir sa réponse. Contrairement à ce que nous espérons, il écrit qu'il ne peut accepter la présidence de l'Union. Les raisons qu'il donne font honneur à sa modestie, mais c'est une non-acceptation.

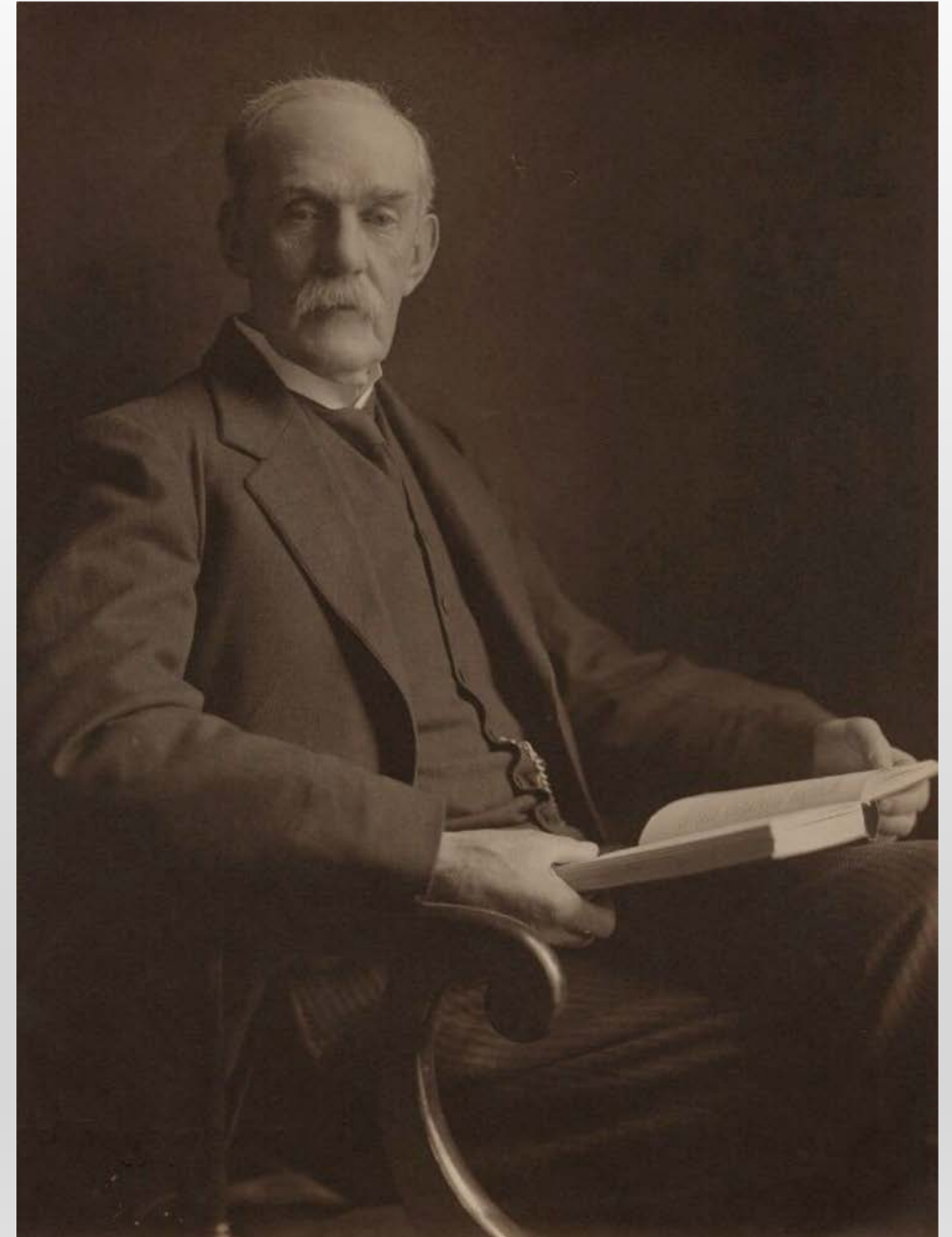
Comme je vous l'ai dit lors de votre passage à Paris, je sais que nous pouvons compter sur le confraternel dévouement de Monsieur Manne Siegbahn pour accepter sa désignation comme président.

Je viens donc vous demander, et vous serais

SUN Commission

Richard Glazebrook

- Institut International du Froid (W.H. Keesom)
- Committee of the International Electrotechnical Commission (R. Glazebrook)
- *Tables annuelles de constantes et donnees numeriques de chimie, de physique et de technologie* (Ch. Marie)
- *Strukturbericht* (P.P. Ewald and C. Hermann)



A dream in waiting

The first two decades of the IUPAP

Jaume Navarro

Ikerbasque and University of the Basque Country

