

THE INSTITUTE FOR ADVANCED STUDY
SCHOOL OF MATHEMATICS
PRINCETON, NEW JERSEY

December 10, 1947

Professor Ramon Ortiz Fornaguera
Residencia Consejo Investigaciones
Pinar, 21
Madrid, Spain

Dear Sir:

I have just received your very kind letter of December 1st, and I hasten to answer it.

I have had some contacts with the Alien Property Custodian regarding the copyright of my book, but they haven't yet been quite conclusive. I also found it somewhat difficult to explain to him in what way his office could influence your translation project in Spain. I would be much obliged to you if you could, without too much of a burden to yourself, explain to me in another letter exactly what it is that I could do at this end. The Alien Property Custodian, I assume, has only vested J. Springer's property in the United States. There may or may not be an international agreement between Spain and the Allies concerning German property, but you will probably find it easier to ascertain that matter in Madrid. In any event, I shall be very glad to help you in connection with any specific suggestions you may make. I need not tell you that I shall be most honored and pleased if a Spanish edition of my book on "Mathematische Grundlagen der Quantenmechanik" will appear.

I am very much obliged to you for your kind interest in my book, and I am much obliged also for the suggestions you make in connection with the misprints or errors in it. I shall appreciate it if you will send me your list of misprints.

Regarding the difficulty on page 229 which you mention, it seems to me it can be removed by correcting what I think was merely a misprinting. Formula (2) on page 229 should have contained not f_m but \bar{f}_m . I think if you re-read the text with this correction in view (it may involve a few parallel adjustments in the subsequent text), you will find that everything is self-consistent and correct.

Your questions on the nature of mathematical physics and theoretical physics are interesting but a little difficult to answer with precision in my own mind. I have always drawn a somewhat vague line of demarcation between the two subjects, but it was really more a difference in distribution of emphases. I think that in theoretical physics the main emphasis is on the connection with experimental physics and those methodological processes which lead to new theories and new formulations, whereas mathematical physics deals with the actual solution and mathematical execution of a theory which is assumed to be correct per se, or assumed to be correct for the sake of the discussion.

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In other words, I would say that theoretical physics deals rather with the formation and mathematical physics rather with the exploitation of physical theories. However, when a new theory has to be evaluated and compared with experience, both aspects mix.

With highest regards, I am, sir,

Yours very sincerely,

A handwritten signature in cursive script, reading "John von Neumann". The signature is written in dark ink and is positioned to the right of the typed name.

JOHN VON NEUMANN

JVN:LD