

Recd 2 / 4. 1920.
Rpld (letter, 6 pp.) 8 / 4. 1920.¹

Berlin-Grunewald, 21 March 20

Very esteemed Doctor,

Receive my best thanks for your valued letter of the 10th of this month and the offprint you sent of your interesting essay in the *Philosophical Magazine* on the compressible light ether. To be sure, there is something alluring about explaining the new Einstein effect, the deflection of light rays near the sun, in the old way, by a condensation of the light ether. But nevertheless, I have to say that I have entirely stepped back from

¹ Translator's note: These two lines are in English in the original.

that kind of approach, which was only a makeshift, now that we have the theory of relativity. I developed the idea back then in an exchange of letters with Lorentz, but it never properly satisfied me, because I still found too much arbitrariness in it. Nonetheless, it seemed interesting to me to emphasize (as I wrote to Lorentz with the corresponding calculations²) that it indeed does not resolve matters if the ether is taken to be adhering to the earth's surface, but that practically the same result is obtained if the ether is thought of as condensed and gliding along the earth's

² Translator's note: "With the corresponding calculations" is added above the line.

surface. While I did not ascribe any great significance to the subject, for the reasons mentioned, Lorentz did consider it, in connection with related questions, worth the trouble to publish, and he did so with my agreement.

Now I am again reminded of these things by your note, but despite the deftness with which you know how to awaken interest in these things again, I nevertheless have to say that for the time being I still do not think differently about them than before. Yes, if the red shift of the spectral lines called for by the theory of relativity did not exist!³ That would be something

³ Translator's note: This passage is highlighted by a vertical line in the margin.

entirely different. But I still continue to believe that on exact measurement, it will be shown to be in fact the case, and I intend in any event to wait on further speculations until this experimental question has been decided.

Right now I am working industriously on the new edition of my *Wärmestrahlung* [Heat radiation] and the new formulation of quantum theory occasioned by it. One does gradually make some forward progress.

With the best of greetings, your most devoted

M. Planck