

Review of: "Representations and Implications of Papers Written by E.T. Whittaker in 1903 and 1904"

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I find this short article by Titleman very interesting, because it reports Whittaker's results whose knowledge is not very widespread. As far as I'm concerned, I must confess that, despite having a perhaps stronger interest in the history of the discipline than some other physicist colleagues, I wasn't aware of it. Whittaker's works, moreover, are almost a bibliographical rarity since a long time and the only one I own is the 1910 edition of "A History of the Theories of Aether and Electricity", which contains no mention of these results (which Titleman states are instead cited in the 1951 extended edition).

The article is therefore worth reading because it talks about things that are little known, and which would require wider dissemination. A more in-depth version of the paper would be desirable, in which the author exposed at least the cornerstones of the derivation of equations 1 and 2. Furthermore, a more detailed explanation of the meaning of the variables reported in the formulas would certainly help their understanding and evaluation. For example, what does the supersign of the variables x , y , z in equation 4 mean?

I cannot follow the author in his speculations reported in the "implications" section. However, equation 1 clearly implies a plane rotation, while equation 2 seems related to a spherical rotation. A sort of vorticity of the wave field could be involved which could prelude, through appropriate periodicity conditions, to quantization procedures of this field different from conventional ones. A more detailed exposition of the topic could perhaps help willing researchers to explore this path.