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SPINORS

By Professor Oswald Veblen

The Institute for Advanced Study, Princeton

The theory of spinors had its origin in the search for a suitable mathematical tool to use in the extension of the quantum theory to the field of relativity. The quantum mechanics in the form that was given to it by Schroedinger describes the motion of a particle by means of the concept of a wave. It is not, as people used to say, that a physicist thinks of an electron as a particle on Mondays, Wednesdays and Fridays, and as a wave on Tuesdays, Thursdays and Saturdays, and on Sundays prays for a Messiah who will lead him back to the belief which he held on Mondays. The actual situation is quite different from that. He works with a mathematical theory which he visualizes for some purposes by means of the classical conception of a particle and for other purposes by means of the imagery of the wave theory. The wave that he works with is just a function which satisfies

1 Fourth of the Joseph Henry Lectures of the Philosophical Society of Washington, presented March 31, 1934, in honor of the first president of the Philosophical Society. This paper was prepared from stenographic notes taken at the time of the lecture.