

# SCIENCE

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## PRESENT TENDENCIES IN THEORETICAL PHYSICS<sup>1</sup>

At a time like the present, when the minds of all of us are intent upon the war and the great issues which depend upon it, it seems almost an affectation to discuss before you a subject so remote from "the instant need of things" as the methods and outlook of theoretical physics. The custom of many years, however, constrains the sectional vice-president to deliver an address. The many questions raised by the war and the relation of science to war have been so thoroughly discussed that I should certainly not be justified in inflicting upon you at great length my own views. The only alternative, therefore, to an appearance of detachment, which I am far from feeling, would have been the abolition for this year of the vice-presidential address before Section B—a measure of war-economy which would have commanded my hearty and unqualified support.

When, however, we turn our minds to a consideration of the recent development of our science, we are confronted at once with the unmistakable fact that there has been little progress since August, 1914, in either theoretical or experimental physics. We had become accustomed to a steady succession, year by year, of important experimental discoveries and of ingenious and original theoretical discussions; we need mention only a few—the Stark Effect, the crystalline diffraction of X-rays, Onnes's

<sup>1</sup> Address of the vice-president and chairman of Section B—Physics—American Association for the Advancement of Science, Pittsburgh, December, 1917.