

# SCIENCE

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## RÉSUMÉ OF OBSERVATIONS CONCERNING THE SOLAR ECLIPSE OF MAY 29, 1919, AND THE EINSTEIN EFFECT<sup>1</sup>

1. A TOTAL eclipse of the sun is of more than passing interest, not merely to the astronomer but also to the geophysicist. Indeed, by reason of the supposed verification of the so-called Einstein effect during the solar eclipse of May 29, 1919, which, in consequence, may make that eclipse the most famous of all eclipses observed thus far, an eclipse of the sun has become of profound interest also to the physicist, to the mathematician, and to the philosopher, in general.

In the following brief account of the chief phenomena observed during the solar eclipse of May 29, 1919, the path of totality for which is shown in Fig. 1, the attempt will be made to bring out succinctly the various points of interest to men of science.

2. To give a personal touch let me first briefly state the results of my own expedition to Cape Palmas, Liberia, where totality was longer (6 minutes and 33 seconds) than at any other accessible station, where the sky was comparatively clear, contrary to all good meteorological predictions, and where totality

<sup>1</sup> Abstract of papers presented before the Philosophical Society of Washington (October 11, 1919 and January 3, 1920), Royal Astronomical Society of Canada, Toronto (December 2, 1919), American Academy of Arts and Sciences, Boston (January 14, 1920), American Philosophical Society, Philadelphia (February 6, 1920) and American Physical Society (New York, February 28). Also basis of public lectures delivered at the following universities: Toronto (December 2, 1919), College of the City of New York (December 4, 1919), Johns Hopkins (January 12), Yale (January 13), Brown (January 15), Columbia (January 16), Swarthmore (February 7) and Middletown Scientific Association of Wesleyan University (March 9).