

treme ends of the visible spectrum are designated red and *purple*, respectively.

There are few mathematical symbols in the text, but mathematical concepts of some stature are discussed—divergence and curl, boundary conditions, invariance, etc. This material is plainly beyond the capabilities of the average intelligent layman for whom the book is intended. It would, perhaps, be more effective and rewarding in the hands of the senior physics major, for whom it might provide a refreshing and thought-stimulating restatement of some of the material he has been over.

Théorie Générale de l'Equation Mathieu. By Robert Campbell. 272 pp. Masson et Cie, Paris, France, 1955. Clothbound 2.900 fr.; paperbound 2.400 fr. *Reviewed by Philip M. Morse, Massachusetts Institute of Technology.*

The connection between the world's practical needs and the progress of mathematics, adumbrated by Bernal and by Hogben, seems to be born out by the recent increase of interest in Mathieu functions and the related spheroidal functions. Elliptic and spheroidal waves are now of practical interest in radar and sonar, as well as in quantum mechanics; this seems to have induced new interest in the mathematical properties of the corresponding functions on the part of mathematical analysts. Since analysts of stature are almost nonexistent in this country (and let's not here go into the reasons for it!) the results of the renaissance have had to come to us from abroad. The first was MacLachlan's *Theory and Application of Mathieu Functions*, second was Meixner and Schäfke's *Mathieusche Funktionen und Sphäroidfunktionen* and now we see the volume under present review.

The ground covered is more or less the same. Readers in this country will probably find MacLachlan's volume more readable; Meixner's is more thorough. Campbell's goes into somewhat more detail in listing the forms in which the solutions may be expressed. But I would list it the least desirable of the three.

L'Interprétation Physique de la Mécanique Ondulatoire et des Théories Quantiques. By Paulette Février. 211 pp. Gauthier-Villars, Paris, France, 1956. Paperbound \$9.28. *Reviewed by L. Marton, National Bureau of Standards.*

The average person, seeing the title of a book, makes for himself a preconceived image of its contents and is disappointed if the author's interpretation of the words used in the title differ from his own. I must confess to this kind of disappointment. For me the words "physical interpretation" bear a close relationship to measurement and experiment; for the author they mean an examination of the logical basis of the theory and a re-evaluation of its contents in terms of what David Bohm called "hidden variables". No doubt this is a

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