



**SOME SOLUTIONS OF EINSTEIN AND
EINSTEIN- MAXWELL EQUATIONS
WITH SPECIAL REFERENCE TO SLOW ROTATION**

by

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ABSTRACT

This work is in the main concerned with solutions of the Einstein and Einstein-Maxwell equations for slowly rotating universes.

Chapter 1 presents a short discussion of the development of the theory of relativity. The mathematical ideas that are necessary to develop the equations of general relativity are discussed in Chapter 2. The Einstein-Maxwell equations for rotating universes are obtained in Chapter 3. A review of some known solutions of Einstein and Einstein-Maxwell equations for rotating objects is given in Chapter 4. Some new solutions for cylindrically symmetric slowly rotating universes and spherically symmetric slowly rotating universes are obtained in Chapters 5 and 6, respectively.

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