Science/Math

In *Topics in the Foundations of General Relativity and Newtonian Gravitation Theory*, David B. Malament presents the basic logical-mathematical structure of general relativity and considers a number of special topics concerning the foundations of general relativity and its relation to Newtonian gravitation theory. These special topics include the geometrized formulation of Newtonian theory (also known as Newton-Cartan theory), the concept of rotation in general relativity, and Gödel spacetime. One of the highlights of the book is a no-go theorem that can be understood to show that there is no criterion of orbital rotation in general relativity that fully answers to our classical intuitions. *Topics* is intended for both students and researchers in mathematical physics and philosophy of science.

"This is a unique book by a talented author who spans the communities of general relativity and philosophy of science. The topics discussed are very interesting and cannot be found in other books on general relativity, and Malament's treatment of them is extremely thorough and careful throughout. I thoroughly enjoyed reading this book."—David Garfinkle, Oakland University

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