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Autore	Petrov Alexander N.
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Sommario/riassunto	By focusing on the mostly used variational methods, this monograph aspires to give a unified description and comparison of various ways of

constructing conserved quantities for perturbations and to study symmetries in general relativity and modified theories of gravity. The main emphasis lies on the field-theoretical covariant formulation of perturbations, the canonical Noether approach and the Belinfante procedure of symmetrisation. The general formalism is applied to build the gauge-invariant cosmological perturbation theory, conserved currents and superpotentials to describe physically important solutions of gravity theories. Meticulous attention is given to the construction of conserved quantities in asymptotically-flat spacetimes as well as in asymptotically constant curvature spacetimes such as the Anti-de Sitter space. Significant part of the book can be used in graduate courses on conservation laws in general relativity. THE SERIES: DE GRUYTER STUDIES IN MATHEMATICAL PHYSICS The series is devoted to the publication of monographs and high-level texts in mathematical physics. They cover topics and methods in fields of current interest, with an emphasis on didactical presentation. The series will enable readers to understand, apply, and develop further, with sufficient rigor, mathematical methods to given problems in physics. The works in this series are aimed at advanced students and researchers in mathematical and theoretical physics. They can also serve as secondary reading for lectures and seminars at advanced levels.