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-- Chapter 17 Variational Principles and Fixed Points in Symmetric Structures -- Chapter 18 Sequential Coercivity over Q-Ordered Q-Metric Spaces -- Chapter 19 A Hardy-Hilbert's Integral Inequality with the Internal Variables Involving Two Derivative Functions.

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## Sommario/riassunto

This book offers a comprehensive exploration of the dynamic intersection between geometry and optimization. It delves into the intricate study of Hermite-Hadamard inequalities, Hilbert type integral inequalities, and variational inequalities, providing a rich tapestry of theoretical insights and practical applications. Readers will encounter a diverse array of topics, including the bounds for the unweighted Jensen's gap of absolutely continuous functions and the properties of Barrelled and Bornological locally convex spaces. The volume also covers advanced subjects such as multiobjective mixed-integer nonlinear optimization and optimum statistical analysis on sphere surfaces. Contributions from eminent scholars provide a deep dive into  $C^*$ -ternary biderivations, Erds-Szekeres products, and variational principles, making this book a must-read for those seeking to expand their understanding of these complex fields. Ideal for researchers and scholars in mathematics and optimization, this volume is an invaluable resource for anyone interested in the latest developments in geometry and nonconvex optimization. Whether you are a seasoned academic or a graduate student, this book will enhance your knowledge and inspire further research in these fascinating domains.

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