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Sommario/riassunto	Based on the third International Conference on Symmetries, Differential Equations and Applications (SDEA-III), this proceedings volume highlights recent important advances and trends in the applications of Lie groups, including a broad area of topics in interdisciplinary studies, ranging from mathematical physics to financial mathematics. The selected and peer-reviewed contributions gathered here cover Lie theory and symmetry methods in differential equations, Lie algebras and Lie pseudogroups, super-symmetry and super-integrability, representation theory of Lie algebras, classification problems, conservation laws, and geometrical methods. The SDEA III, held in honour of the Centenary of Noether's Theorem, proven by the prominent German mathematician Emmy Noether, at Istanbul Technical University in August 2017 provided a productive forum for academic researchers, both junior and senior, and students to discuss and share the latest developments in the theory and applications of Lie symmetry groups. This work has an interdisciplinary appeal and will be a valuable read for researchers in mathematics, mechanics, physics, engineering, medicine and finance.