Bounded Symmetric Domains in Banach Spaces

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This timely book exposes succinctly recent advances in the geometric and analytic theory of bounded symmetric domains. A unique feature is the unified treatment of both finite and infinite dimensional symmetric domains, using Jordan theory in tandem with Lie theory. The highlights include a generalized Riemann mapping theorem, which realizes a bounded symmetric domain as the open unit ball of a complex Banach space with a Jordan structure. Far-reaching applications of this realization in complex geometry and function theory are discussed.

This monograph is intended as a convenient reference for researchers and graduate students in geometric analysis, infinite dimensional holomorphy as well as functional analysis and operator theory.

READERSHIP

Graduate students and researchers in diverse mathematical fields including complex geometry, function theory, functional analysis and operator theory. It would also appeal to algebraists who are interested in the applications of Jordan and Lie algebras.
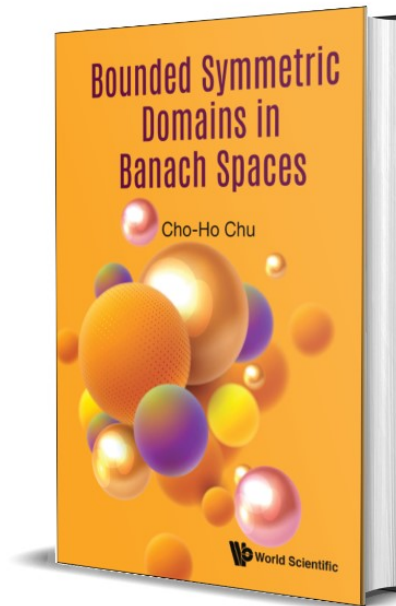
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