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Sommario/riassunto

This book systematically develops the theory of continuous representations on p -adic Banach spaces. Its purpose is to lay the foundations of the representation theory of reductive p -adic groups on p -adic Banach spaces, explain the duality theory of Schneider and Teitelbaum, and demonstrate its applications to continuous principal series. Written to be accessible to graduate students, the book gives a comprehensive introduction to the necessary tools, including Iwasawa algebras, p -adic measures and distributions, p -adic functional analysis, reductive groups, and smooth and algebraic representations. Part 1 culminates with the duality between Banach space representations and Iwasawa modules. This duality is applied in Part 2 for studying the intertwining operators and reducibility of the continuous principal series on p -adic Banach spaces. This monograph is intended to serve both as a reference book and as an introductory text for graduate students and researchers entering the area.