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		Functions of a Complex Variable
		Functional Analysis
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	Nota di contenuto	Preface -- Hardy Spaces -- The Dirichlet space -- Bergman space of the unit disc -- Model Spaces -- Operators on Function Spaces -- Truncated Toeplitz Operators -- Semigroups of weighted composition operators on spaces of holomorphic functions -- The Corona Problem -- A brief introduction to noncommutative function theory -- An invitation to the Drury-Arveson space -- References.
	Sommario/riassunto	The focus program on Analytic Function Spaces and their Applications took place at Fields Institute from July 1st to December 31st, 2021. Hilbert spaces of analytic functions form one of the pillars of complex analysis. These spaces have a rich structure and for more than a century have been studied by many prominent mathematicians. They have essential applications in other fields of mathematics and engineering. The most important Hilbert space of analytic functions is the Hardy class H2. However, its close cousins—the Bergman space A2, the Dirichlet space D, the model subspaces Kt, and the de Branges-Rovnyak spaces H(b)—have also garnered attention in recent decades.

Leading experts on function spaces gathered and discussed new achievements and future venues of research on analytic function spaces, their operators, and their applications in other domains. With over 250 hours of lectures by prominent mathematicians, the program spanned a wide variety of topics. Moreexplicitly, there were courses and workshops on Interpolation and Sampling, Riesz Bases, Frames and Signal Processing, Bounded Mean Oscillation, de Branges-Rovnyak Spaces, Blaschke Products and Inner Functions, and Convergence of Scattering Data and Non-linear Fourier Transform, among others. At the end of each week, there was a high-profile colloquium talk on the current topic. The program also contained two advanced courses on Schramm Loewner Evolution and Lattice Models and Reproducing Kernel Hilbert Space of Analytic Functions. This volume features the courses given on Hardy Spaces, Dirichlet Spaces, Bergman Spaces, Model Spaces, Operators on Function Spaces, Truncated Toeplitz Operators, Semigroups of weighted composition operators on spaces of holomorphic functions, the Corona Problem, Non-commutative Function Theory, and Drury-Arveson Space. This volume is a valuable resource for researchers interested in analytic function spaces.