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Nota di contenuto	Some Assumptions -- An Elementary Introduction -- Exponential Square -- Many Dimensions; Smoothing -- The Calderón Reproducing Formula I -- The Calderón Reproducing Formula II -- The Calderón Reproducing Formula III -- Schrödinger Operators -- Some Singular Integrals -- Orlicz Spaces -- Goodbye to Good-? -- A Fourier Multiplier Theorem -- Vector-Valued Inequalities -- Random Pointwise Errors.
Sommario/riassunto	Littlewood-Paley theory is an essential tool of Fourier analysis, with applications and connections to PDEs, signal processing, and probability. It extends some of the benefits of orthogonality to situations where orthogonality doesn’t really make sense. It does so by letting us control certain oscillatory infinite series of functions in terms of infinite series of non-negative functions. Beginning in the 1980s, it was discovered that this control could be made much sharper than was previously suspected. The present book tries to give a gentle, well-motivated introduction to those discoveries, the methods behind them, their consequences, and some of their applications.