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Autore	Colombo Fabrizio
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Nota di contenuto	Introduction -- Slice hyperholomorphic functions -- The S-spectrum and the S-functional calculus -- Properties of the S-functional calculus for bounded operators -- The S-functional calculus for unbounded operators -- The H1 functional calculus -- The F-functional calculus for bounded operators -- The F-functional calculus for unbounded operators -- Quaternionic operators on a Hilbert space -- Spectral integrals -- The spectral theorem for bounded normal operators -- The spectral theorem for unbounded normal operators -- Spectral theorem for unitary operators -- Spectral Integration in the Quaternionic Setting -- Bounded Quaternionic Spectral Operators.
Sommario/riassunto	The subject of this monograph is the quaternionic spectral theory based on the notion of S-spectrum. With the purpose of giving a systematic and self-contained treatment of this theory that has been developed in the last decade, the book features topics like the S-functional calculus, the F-functional calculus, the quaternionic spectral theorem, spectral integration and spectral operators in the quaternionic setting. These topics are based on the notion of S-spectrum of a

quaternionic linear operator. Further developments of this theory lead to applications in fractional diffusion and evolution problems that will be covered in a separate monograph.