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Titolo	Ordinary and Fractional Approximation by Non-additive Integrals: Choquet, Shilkret and Sugeno Integral Approximators / / by George A. Anastassiou
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Nota di contenuto	Approximation with rates by Kantorovich-Choquet quasi-interpolation neural network operators -- Approximation with rates by Perturbed Kantorovich-Choquet Neural Network Operators -- Approximation with rates by Shift Invariant Univariate Sublinear-Choquet Operators -- Approximation with rates by Shift Invariant Multivariate Sublinear-Choquet Operators -- Hardy type inequalities for Choquet integrals -- Quantitative Approximation by Choquet integrals -- Conformable Fractional Approximation by Choquet integrals -- Multivariate and Convex Quantitative Approximation by Choquet integrals -- Caputo and Canavati fractional Quantitative Approximation by Choquet integrals -- Mixed Conformable and Iterated fractional Quantitative Approximation by Choquet integrals.
Sommario/riassunto	Ordinary and fractional approximations by non-additive integrals, especially by integral approximators of Choquet, Shilkret and Sugeno types, are a new trend in approximation theory. These integrals are only subadditive and only the first two are positive linear, and they

produce very fast and flexible approximations based on limited data. The author presents both the univariate and multivariate cases. The involved set functions are much weaker forms of the Lebesgue measure and they were conceived to fulfill the needs of economic theory and other applied sciences. The approaches presented here are original, and all chapters are self-contained and can be read independently. Moreover, the book's findings are sure to find application in many areas of pure and applied mathematics, especially in approximation theory, numerical analysis and mathematical economics (both ordinary and fractional). Accordingly, it offers a unique resource for researchers, graduate students, and for coursework in the above-mentioned fields, and belongs in all science and engineering libraries.
