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   Sommario/riassunto   Designing and controlling complex shapes like porous volumes and
                        rough surfaces is a challenge. Fractal geometry is an interesting
                        approach which considerably simplify the problem. Even though
                        underlying concepts reduce the set possible shapes, they generate a
                        surprising variety of shapes. In this book we present a formalism to
                        design such complex objects for geometric aided geometry design
                        applications. The goal of this formalism is to provide to the end user
                        the possibility to manipulate fractal objects as a standard euclidean
                        object with standard tools of CAD system. This formalism encompass
                        curves, surfaces, volumes, as well as NURBS and subdivision surfaces.
                        All theoretical and practical aspects are developed, from the design up
                        to 3D printing