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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Basic Notions and Ideas -- Splitting Deformations of Degenerations -- What is a barking? -- Semi-Local Barking Deformations: Ideas and Examples -- Global Barking Deformations: Ideas and Examples -- Deformations of Tubular Neighborhoods of Branches -- Deformations of Tubular Neighborhoods of Branches (Preparation) -- Construction of Deformations by Tame Subbranches -- Construction of Deformations of type AI -- Construction of Deformations by Wild Subbranches -- Subbranches of Types AI, BI, CI -- Construction of Deformations of Type BI -- Construction of Deformations of Type CI -- Recursive Construction of Deformations of Type CI -- Types AI, BI, and CI Exhaust all Cases -- Construction of Deformations by Bunches of Subbranches -- Barking Deformations of Degenerations -- Construction of Barking Deformations (Stellar Case) -- Simple Crusts (Stellar Case) -- Compound barking (Stellar Case) -- Deformations of Tubular Neighborhoods of Trunks -- Construction of Barking Deformations (Constellar Case) -- Further Examples -- Singularities of Subordinate Fibers near Cores -- Singularities of Fibers around Cores -- Arrangement Functions and Singularities, I -- Arrangement Functions and Singularities, II -- Supplement -- Classification of Atoms of Genus ? 5 -- Classification Theorem -- List of Weighted Crustal Sets for Singular Fibers of Genus ? 5.

Sommario/riassunto

The author develops a deformation theory for degenerations of complex curves; specifically, he treats deformations which induce splittings of the singular fiber of a degeneration. He constructs a deformation of the degeneration in such a way that a subdivider is "barked" (peeled) off from the singular fiber. These "barking deformations" are related to deformations of surface singularities (in particular, cyclic quotient singularities) as well as the mapping class groups of Riemann surfaces (complex curves) via monodromies. Important applications, such as the classification of atomic degenerations, are also explained.
