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Nota di bibliografia	Includes bibliographical references (pages 115-118) and index.
Nota di contenuto	Preface -- Notations and conventions -- Some geometric measures theory -- Jones' traveling salesman theorem -- Menger curvature -- The Cauchy singular integral operator on Ahlfors-regular sets -- Analytic capacity and the Painlevé Problem -- The Denjoy and Vitushkin conjectures -- The capacity $gamma (+)$ and the Painlevé Problem -- Bibliography -- Index.
Sommario/riassunto	Based on a graduate course given by the author at Yale University this book deals with complex analysis (analytic capacity), geometric measure theory (rectifiable and uniformly rectifiable sets) and harmonic analysis (boundedness of singular integral operators on Ahlfors-regular sets). In particular, these notes contain a description of Peter Jones' geometric traveling salesman theorem, the proof of the equivalence between uniform rectifiability and boundedness of the Cauchy operator

on Ahlfors-regular sets, the complete proofs of the Denjoy conjecture and the Vitushkin conjecture (for the latter, only the Ahlfors-regular case) and a discussion of X. Tolsa's solution of the Painlevé problem.