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   Nota di bibliografia   Includes bibliographical references (p. [239]-245) and index.

   Nota di contenuto   Part I Foundations of Sections -- 1 Continuous Non-abelian H1 with Profinite Coefficients.-2 The Fundamental Groupoid -- 3 Basic Geometric Operations in Terms of Sections -- 4 The Space of Sections as a Topological Space -- 5 Evaluation of Units -- 6 Cycle Classes in Anabelian Geometry -- 7 Injectivity in the Section Conjecture -- Part II Basic Arithmetic of Sections -- 7 Injectivity in the Section Conjecture -- 8 Reduction of Sections -- 9 The Space of Sections in the Arithmetic Case and the Section Conjecture in Covers -- Part III On the Passage from Local to Global -- 10 Local Obstructions at a p-adic Place -- 11 Brauer-Manin and Descent Obstructions -- 12 Fragments of Non-abelian Tate–Poitou Duality -- Part IV Analogues of the Section Conjecture -- 13 On the Section Conjecture for Torsors -- 14 Nilpotent Sections -- 15 Sections over Finite Fields -- 16 On the Section Conjecture over Local Fields -- 17 Fields of Cohomological Dimension 1 -- 18 Cuspidal Sections and Birational Analogues.

   Sommario/riassunto   The section conjecture in anabelian geometry, announced by Grothendieck in 1983, is concerned with a description of the set of rational points of a hyperbolic algebraic curve over a number field in terms of the arithmetic of its fundamental group. While the conjecture

is still open today in 2012, its study has revealed interesting arithmetic for curves and opened connections, for example, to the question whether the Brauer-Manin obstruction is the only one against rational points on curves. This monograph begins by laying the foundations for the space of sections of the fundamental group extension of an algebraic variety. Then, arithmetic assumptions on the base field are imposed and the local-to-global approach is studied in detail. The monograph concludes by discussing analogues of the section conjecture created by varying the base field or the type of variety, or by using a characteristic quotient or its birational analogue in lieu of the fundamental group extension.