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Nota di contenuto	Frontmatter -- Contents -- Preface -- 1. Seaweed Meanders -- 2. Meanders -- 3. Morse Meanders and Sturm Global Attractors -- 4. Right and Left One-Shifts -- 5. Connection Graphs of Type I, II, III and IV -- 6. Meanders and the Temperley-Lieb Algebra -- 7. Seaweed Lie Algebras and Seaweed Meanders -- 8. Classical Yang-Baxter Equation and Seaweed Meanders -- Summary in German (Zusammenfassung) -- Bibliography
Sommario/riassunto	This unique book's subject is meanders (connected, oriented, non-self-intersecting planar curves intersecting the horizontal line transversely) in the context of dynamical systems. By interpreting the transverse intersection points as vertices and the arches arising from these curves as directed edges, meanders are introduced from the graphtheoretical perspective. Supplementing the rigorous results, mathematical methods, constructions, and examples of meanders with a large number of insightful figures, issues such as connectivity and the number of connected components of meanders are studied in detail with the aid of collapse and multiple collapse, forks, and chambers. Moreover, the author introduces a large class of Morse meanders by utilizing the right and left one-shift maps, and presents connections to

Sturm global attractors, seaweed and Frobenius Lie algebras, and the classical Yang-Baxter equation. Contents Seaweed Meanders Meanders Morse Meanders and Sturm Global Attractors Right and Left One-Shifts Connection Graphs of Type I, II, III and IV Meanders and the Temperley-Lieb Algebra Representations of Seaweed Lie Algebras CYBE and Seaweed Meanders