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Titolo	Stochastic Evolutions of Dynamic Traffic Flow : Modeling and Applications / / by Xiqun (Michael) Chen, Li Li, Qixin Shi
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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Introduction. - Literature Review -- Empirical Observations of Stochastic and Dynamic Evolutions of Trac Flow -- A Markov Model Based on Headway/Spacing Distributions -- Stochastic Fundamental Diagram Based on Headway/Spacing Distributions -- Trac Flow Breakdown Model Based on Headway/Spacing Distributions -- Conclusions and Future Work.
Sommario/riassunto	This book reveals the underlying mechanisms of complexity and stochastic evolutions of traffic flows. Using Eulerian and Lagrangian measurements, the authors propose lognormal headway/spacing/velocity distributions and subsequently develop a Markov car-following model to describe drivers' random choices concerning headways/spacings, putting forward a stochastic fundamental diagram model for wide scattering flow-density points. In

the context of highway onramp bottlenecks, the authors present a traffic flow breakdown probability model and spatial-temporal queuing model to improve the stability and reliability of road traffic flows. This book is intended for researchers and graduate students in the fields of transportation engineering and civil engineering.