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Altri autori (Persone)	AllsopRichard E HeydeckerBenjamin
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Nota di contenuto	Front Cover; Mathematics in Transport; Copyright Page; Table of Contents; Preface; Tribute to Richard Allsop; Contributors; Chapter 1 Sensitivity of traffic conditions at road junctions to movement-specific flows of approaching vehicles; Chapter 2 Vehicle crash compatibility and sports utility vehicles (SUVs); Chapter 3 Bilevel optimisation of prices in network equilibrium models; Chapter 4 Minimal revenue network tolling: system optimisation under stochastic assignment with elastic demand; Chapter 5 A new solution scheme for the link toll optimisation problem Chapter 6 Two-direction methods for variable demand traffic assignmentChapter 7 Investigating a class of car following model on a ring; Chapter 8 A general framework for the calibration and validation of car-following models along an uninterrupted open highway; Chapter 9 Determining appropriate parameter values for a nonlinear car-following model; Chapter 10 Improving the empirical basis for cycle planning; Chapter 11 Optimal congestion pricing design methods in integrated location/transport models; Chapter 12 Spatial Bayesian

modelling of road accidents at the local authority level

Chapter 13 An analysis of the dilemma zone problem at high-speed signalised intersections with the SA control strategyChapter 14 Properties of random utility discrete choice models; Chapter 15 A stochastic user equilibrium model with stochastic demand; Chapter 16 Existence of equilibrium in a continuous dynamic queueing model for traffic networks; Chapter 17 Equivalent optimization problem for finding equilibrium in the bottleneck model with departure time choices; Chapter 18 Toward a general framework for dynamic road pricing; Chapter 19 Variance and accuracy of the sheared queue model Chapter 20 A new numerical scheme for bounding acceleration in the LWR modelChapter 21 Resolution of the Aw, Rascle and Zhang macroscopic second order traffic flow model; Chapter 22 A cell transmission model for signal timing optimisation in work zones; Chapter 23 Reserve capacity for a set of closely-spaced intersections; Chapter 24 Car following, route choice, crashes - and the Lambert W-function; Chapter 25 Tracking waves through spatial discontinuities: boundary conditions in the wave tracking resolution of the LWR model; Chapter 26 Flow on links: yesterday, today and tomorrow
Chapter 27 Sensitivity analysis of network traffic equilibria revisited: the corrected approachChapter 28 Practical obstacles in the sensitivity analysis of network equilibria

Sommario/riassunto

This volume contains selected peer-reviewed papers presented at the IMA 4th International Conference on Mathematics in Transport. These papers deal with the development and application of mathematical and statistical modelling in transport and present research on the mathematical ideas and methodologies required to cope with the increasing demand on transport infrastructure. Authorship is international and a wide variety of topics are covered including public transport and scheduling, pricing issues, travel behaviour and choice modelling, safety and spatial and location modelling.