

数学的实践与认识

2011 年第 41 卷第 10 期

目 次

管理科学

- 基于藤 Copula 的多资产交换期权模拟定价 吴恒煜, 陈 鹏, 严 武, 吕江林 (1)
- 基于二层信用支付的变质物品库存模型 潘义前, 劳毅慧 (11)
- 中国城镇居民消费支出的多元非线性回归模型研究 赵丽棉, 黄基廷 (20)
- 带最小交易单位的 Markowitz 模型及算法 陈许红, 王 玲 (26)
- 中国高新技术产业投入产出表和社会核算矩阵编制的方法与应用 张同斌, 刘 敏, 高铁梅 (33)
- 博弈训练及其对均衡的影响 张登兵 (45)
- 基于信息熵的轿车选型模型及应用 何瑜萍, 乔金友 (51)
- 基于随机时滞模型的学习成绩波动规律 陈育庭 (57)
- 嵌入物联网信息采集影响 PLM 成本收益模型研究 吴 亮, 阮方鸣 (68)

工 程

- 一种改进的顶杆小车控制算法 丁 洁, 秦建敏 (76)
- 油田开发指标系统的概率模拟预测 钟仪华, 徐 瑶, 王 昱 (80)
- K(0,1)-TPN 方法在三防系统安全性分析应用 范月科, 王宇龙, 孙玉武, 武 伟, 杨荫钊 (87)
- 基于协整理论和灰色系统的我国粗钢需求预测 彭 涛, 余元冠, 颜云云 (102)

应 用

- 灰色 TSP 问题的研究 夏德昌, 李智慧, 张 静 (109)
- 一类非线性 EV 模型的降维估计 刘 强 (114)
- 带启动 - 关闭期的多重休假 M/G/1 排队系统的队长分布 蒲 会, 唐应辉 (120)
- 关于开或闭模型的指数稳定性 张丽燕, 姜英秀, 张玉峰 (130)
- 基于 GIS 和禁忌搜索集成技术的农产品物流配送路径优化 邱荣祖, 钟聪儿, 修晓虎 (145)
- 带有负顾客且具有反馈的 $M/M/1/N$ 工作休假排队 顾庆凤, 朱翼隼 (153)
- 关于一个脉冲用药的 HIV 免疫模型的研究 林东榕, 惠 静, 庞建华 (160)
- 具有离散性的连续性模型映射 张兰华, 刘桂娟, 左风华, 唐 源, 曹 宸, 薛绍伟 (167)
- 灰色 Verhulst 模型的改进及其应用 陈 露 (172)
- 具有一种故障类型的二相关单元冗余系统的指数稳定性 王犬辉 (178)
- 基于 CAIV/EA 的武器装备经济可承受性优化设计 李延杰, 刘晓东, 付雅芳 (186)
- 基于矩阵模型表示的 (线性) 有限自动机的同步序列判定 杨 楠, 曹发生, 邓培民 (192)
- 一类比率型功能性反应捕食模型的稳定性分析 张 剑, 张宏民, 堵秀凤 (198)

研 究

- 有关拓扑学与覆盖粗糙集的一些结论 吴志远, 吴根秀, 钟培华, 熊禾根 (205)
- 一类新的非单调信赖域算法 庞善民, 陈兰平 (211)
- Kraft 不等式的改进 赵 平, 胡思贵, 胡华碧 (219)
- 一种确定求积公式误差最优估计的简单方法 郑华盛, 徐 伟 (225)
- 一类无界算子的 Weyl 定理 吴德玉, 阿拉坦仓 (230)
- 一个新的 Hilbert 型不等式 刘幸东, 谢子填 (234)
- $2p^n$ 阶连通 p^2 度的半对称图 王 丽 (239)
- M - 群的正规子群 靳 平, 徐茂智 (244)

教学园地

- 生成度量矩阵的新算法及拟度量矩阵的性质研究 张三强, 周远国, 詹崇森, 李 莉 (248)
- 共线点与共点线问题的研究 马玉峰 (251)

MATHEMATICS IN PRACTICE AND THEORY

2011 Vol.41 No.10

Contents

Managed Science

- Multi-Name Assets Exchange Option Simulate Pricing Based On Pair-Copulas WU Heng-yu, CHEN Peng, YAN Wu, LV Jiang-lin(1)
- An Inventory Model for Deteriorating Items Based No Two Levels of Trade Credit Payment PAN Yi-qian, LAO Yi-hui (11)
- Using Multiple Nonlinear Regression Model to Study Consumption Expenditure of Urban Residents In China ZHAO Li-mian, HUANG Ji-ting (20)
- Markowitz Model and Algorithm with The Minimum Unit of Trading CHEN Xu-hong, WANG Ling (26)
- The Tabulations of I-O Table and Social Accounting Matrix of High-tech Industry in China ZHANG Tong-bin, LIU Min, GAO Tie-mei (33)
- Game Training and its Effects on Equilibrium ZHAND Deng-bing(45)
- Car Selection Model and Application Based on Information Entropy Method HE Yu-ping, QIAO Jin-you(51)
- Fluctuation Rules of Grades Based on Stochastic Delay Model CHEN Yu-ting (57)
- A Study on PLM Cost Model Embed Internet of Things to Collect Information WU Liang, RUAN Fang-ming(68)

Engineering

- The Improved Control Algorithm on the Mandrel Thrust Block of Piercing Mill DING Jie, QIN Jian-min (76)
- Probability Simulation Prediction on the System of Oilfield Development Indices ZHONG Yi-hua, XU Yao, WANG Yu(80)
- The Application of $K(0, 1)$ -TPN Method in the Safety Analysis of the Three Defense System FAN Yue-ke, WANG Yu-long, SUN Yu-wu, WU Wei, YANG Yin-zhao (87)
- Prediction Study on Steel Demand of China Based on Cointegration and Grey System Theory PENG Tao, SHE Yuan-guan, YAN Yun-yun (102)

Applications

- Study on Grey Traveling Salesman Problem XIA De-chang, LI Zhi-hui, ZHANG Jing (109)
- Estimation of a Kind of Nonlinear EV Models Based Dimension Reduction LIU Qiang (114)
- The Queue-Length Distribution For M/G/1 Queueing System with Startup -Close Periods and Multiple Vacations PU hui, TANG Ying-hui (120)
- Stability Analysis of the Open or Close Models ZHANG Li-yan, JIANG Ying-xiu, ZHANG Yu-feng (130)
- Optimization of Vehicle Routing Problem for Agriculture Products Logistics Distribution Based on the Integration Technology of GIS and Tabu Search QIU Rong-zu, ZHONG Cong-er, XIU Xiao-hu (145)
- M/M/1/N Feedback Queue with Negative Customers and Working Vacations GU Qing-feng, ZHU Yi-juan(153)
- The Study on A Immunological Model of HIV Infection with Impulsive Dosing Scheme LIN Dong-rong, HUI Jing, PANG Jian-hua (160)
- Continuity Model Mapping with Discreteness ZHANG Lan-hua, LIU Gui-juan, ZUO Feng-hua, CAO Chen, TANG Yi-yuan, XUE Shao-wei(167)
- Improvement of Grey Verhulst Model and Application CHEN Lu (172)
- Exponential Stability of Two Correlated Unites Redundant System with One Types of Failure WANG Tian-hui (178)
- Weapon Affordability Optimization Design Based-on CAIV/EA LI Yan-jie, LIU Xiao-dong, FU Ya-fang(186)
- The Determination of Synchronous Sequence of (Linear) Finite Automata Based on Its Matrix Model YANG Nan, CAO Fa-sheng, DENG Pei-min (192)
- Stability Analysis of a Ratio-Dependent Functional Response Predator-Prey Model ZHANG Jian, ZHANG Hong-min, DU Xiu-feng (198)

Research

- Some Results on the Topology and Covering Rough Set WU Zhi-yuan, WU Gen-xiu, ZHONG Pei-hua, XIONG He-gen (205)
- A New Family of Nonmonotone Trust Region Algorithm PANG Shan-min, CHEN Lan-ping (211)
- Improvement on Kraft's Inequality ZHAO Ping, HU Si-bi, HU Hua-bi (219)
- A Simple Method of Determining Error and its Optimal Estimation for Quadrature Formula ZHENG Hua-sheng, XU Wei(225)
- Weyl's Theorem for a Class of Unbounded Operators WU De-yu, Alataancang(230)
- Semisymmetric Graphs of Order $2P^N$ and Valency p^2 WANG Li (239)
- Normal Subgroups of M -Groups JIN Ping, XU Mao-zhi(244)

Teaching Field

- On Studying Property of Quasimeasure Matrix and the New Algorithm of Generating Measure Matrix ZHANG San-qiang, ZHOU Yuan-guo, ZHAN Tang-sen, LI Li(248)
- On The Study of Collinear Point Problems MA Yu-feng (251)