



一门科学只有在成功地运用数学时，
才算达到了真正完善的地步。

ISSN 1000-0984

CODEN SSHRE8

——马克思

数学的实践与认识

MATHEMATICS

IN PRACTICE AND THEORY

第四十三卷

Vol. 43

第5期

No.5

2013



3 2956 5265 9

中国数学学会会刊

中国科学院数学与系统科学研究院主办

科学出版社出版

MATHEMATICS IN PRACTICE AND THEORY

2013 Vol.43 No.5

Contents

Managed Science

- The Study of Queuing Problem Based on the Probability Theory of Mobile Business Office WANG Cheng-fei, BAI Qing-guo (1)
The Stochastic Optimal Model on the Risk Portfolio of Extreme Flood Insurance MA Shu-jian, ZHANG Li-li(6)
Provincial Energy Efficiency Evaluation in China Based on Super-Efficiency-DEA ZHU Bang-zhu, WU Wan-shui, WANG Ping(13)
An Improved Time Series Forecasting Method Based on Ewma-Ann Mixed Model ZHANG Dong, AN Yu-e, FU Juan (20)
Research on Relationship among Paternalistic Leadership, Organizational Commitment and Organizational Performance ZHAO Xiang-zhong, WANG Yun-feng (29)
Analysis of Evaluation Results on Henan Municipal Government Website Performance based on Aggregative Rank ZANG Zhen-chun, CUI Chun-sheng(36)
Statistics and Analysis of Psychological Health of Student from Engineering Higher Vocational College ZHANG Yong-feng, GUO Fei, CHEN Chun-xia(43)
The Optimal Endogenous Economic Growth Considering the Abatement Cost of Carbon Dioxide Emissions GONG Wei-feng, WANG Chuan-hui, ZHOU De-qun (49)
Method of Dynamic Comprehensive Evaluation Based on Idea of "Sound and Fast Development" YU Deng-ke, ZHOU Rong, TU Guo-ping(55)
The Game Model of Chinese Enterprise's Foreign Investment Strategy from the Perspective of Transfer Pricing E Li-bin (65)
A Forecast to the Development of a Fund Portfolio Based on ARIMA Analysis ZHOU Yi-chen, XUE Hui-feng, ZHANG Bin(73)

Engineering

- Design and Application of a Coplanar Multi-Electrode Capacitance Sensing Type Sensor for Ice Thickness Detection FAN Jin-hua, DOU Ying-ke, QIN Jian-min, ZHANG Rui-feng(79)
Information Science
Safety Risk Prevention of Cloud Computing for Enterprises SUN Feng(85)
A Study of Production Network Externalities in Regional Logistics JIANG Yan-hu, LIAO Ying, RU Ri-dong(89)
Research on Extended Cloud Service Model and Open Cloud Standards SHI Ai-wu, XIA You-fu(95)
The Research of Iris Recognition in Meat Food Traceability Based on the Things of Internet LUO Zhong-jiang, DUAN Zhuo-hua, DAI Jing-guo(102)
Application of Cloud Computing Technology in the Transmission Line Condition Monitoring System SONG Ya-qi, LIU Shu-ren, ZHU Yong-li, WANG De-wen(109)
Research on E-business Enterprises Financial System Support — Based on the Analysis of Capital Demand and Supply XU Yao-zhi, WU Ji-yi, HU Yu-ping, ZHANG Jian-lin (116)

Applications

- Data Uncertainties in Electronic Warfare Test and Training System KE Hong-fa, LIU Si-feng, CHEN Yong-guang, FANG Zhi-geng(124)
Global Attractivity of a Semi-Ratio-Dependent Predator-Prey Discrete System with Holling I Functional Response LI Xiao-hong, DU Xiu-feng, ZHENG Da-zhao, ZHAO Jian-tao (133)
The Construction of Strengthening Buffer Operator with Variable Weights HE Tong-li, GAN Jian-hong (137)
Research on Crime Rate with Integration of Multivariate Principal Component and Factor Analysis Algorithm FU Yan-ru (142)
Solution of Bias Static Game with Fuzzy Profit by Making Use of the Method of Structured Element ZHOU Xiu-li, GUO Si-zong(149)
The Application of Fisher'S Discriminate Analysis PAN Jin-song(155)
High-dimensional Heteroskedasticity Penalized Gaussian Mixture Model-Based Clustering LI Mu-yu, WANG Xing(163)
A Two-Stage Approach to Overcoming the Infeasibility of SBM Super-Efficiency Model in Data Envelopment Analysis QIAN Zhen-hua, CHENG Gang(171)
Analysis on China's Rural Residents' Income during 1997-2007 Based on Structure Decomposition Analysis LI Hui, CHEN Xi-kang(179)
Analysis of an SIS Epidemic Model with Disease-Induced Mortality WU Peng-fei, Duanmu Jing-shun, DU Ji-yong , CAO Zhong-hong (186)
Penalized Modified Quadratic Inference Functions for Nonparametric Models with Longitudinal Data ZHAO Ming-tao, HE Xiao-qun(193)

Research

- The Gray Images of Cyclic Codes over $Z_p[u]/(u^{k+1})$ LIANG Hua, TANG Yuan-sheng(200)
Limit Properties for Divergence of Non-homogeneous Markov Processes TANG Ying, ZHANG Yue, YANG Wei-guo(204)
Robust H_∞ Control for Linear Time-varying Periodic Generalized Systems with Parameter Uncertainties FAN Zhong-guang, LIANG Jia-rong , XIAO Jian(210)
The Relative Efficiencies of the Generalized Aggregated Liu Estimators of the Parameters in the Linear Model with Aggregated Date ZHOU Yong-zheng(219)
Frequent Oscillatory Criteria for a Set of Nonlinear Partial Difference Equations YANG Jun, WANG Wen-zhi(226)
Asymptotic Stability in Distribution of Stochastic Hopfield Neural Networks with Markovian Switching ZHAO Yan(234)
Oscillation Criteria for a Class of High-Order Two-term Differential Equations ZHANG Mao-zhu, LI Gong-gang, CHEN Rui(240)
Periodic Solutions for a Class of p -Laplacian Systems with Impulsive Effects LI Li, CHEN Kai, ZHANG Qiong-fen , LIU Yong-jian(247)
Classification of Surfaces of Revolution with Space Like Axis in Minkowski 3- space JIN Ming-hao, PEI Dong-he(257)

数学的实践与认识

2013年第43卷第5期

目 次

管理科学

- 基于概率论的移动营业厅用户排队问题研究 王成飞, 柏庆国 (1)
基于破产理论的我国极端洪水保险风险组合随机优化模型 马树建, 张丽丽 (6)
基于超效率 DEA 的中国省际能源效率评价 朱帮助, 吴万水, 王 平 (13)
一种改进的基于指数平滑神经网络模型的时间序列预测方法 张 东, 安玉娥, 傅 娟 (20)
民企家长型领导、组织承诺与组织绩效的关系研究 赵相忠, 王云峰 (29)
基于集团序的河南省地市级政府网站绩效评估结果的分析 蔡振春, 崔春生 (36)
工科高职院校大学生心理健康的统计分析 张永锋, 郭 飞, 陈春霞 (43)
考虑碳减排成本的内生经济增长路径研究 公维凤, 王传会, 周德群 (49)
基于“又好又快发展”思想的动态综合评价方法 喻登科, 周 荣, 涂国平 (55)
转让定价视角下的我国企业对外投资战略博弈 鄂立彬 (65)
基于 ARIMA 的基金组合绩效成长性的预测 周奕琛, 薛惠锋, 张 斌 (73)

工 程

- 同面多极电容感应式冰层厚度传感器的设计及应用 樊晋华, 窦银科, 秦建敏, 张瑞峰 (79)

信息科学

- 企业云计算应用中的安全风险防范 孙 锋 (85)
区域物流的技术网络效应研究 江延湖, 廖 迎, 胡日东 (89)
云服务的扩展模型和开放云标准的研究 史爱武, 夏友富 (95)
虹膜识别在基于物联网的肉类食品溯源中的研究 罗忠亮, 段琢华, 戴经国 (102)
云计算技术在输电线路状态监测系统中的应用 宋亚奇, 刘树仁, 朱永利, 王德文 (109)
电子商务企业的金融支持体系研究 - 基于资金供给与需求的分析 徐瑶之, 吴吉义, 胡玉平, 章剑林 (116)

应 用

- 电子战系统试验与训练数据的不确定性问题 柯宏发, 刘思峰, 陈永光, 方志耕 (124)
一类具有 Holling I 型反应函数半比例依赖的捕食 — 食饵离散系统的全局稳定性 李晓红, 堆秀凤, 郑大钊, 赵建涛 (133)
几类变权强化缓冲算子的构造研究 何童丽, 甘建红 (137)
融合多变量主成份与因子分析算法的犯罪率研究 付艳茹 (142)
求收益模糊的贝叶斯纳什均衡解的结构元方法 周秀丽, 郭嗣琮 (149)
Fisher's 判别分析及应用 潘劲松 (155)
高维异方差高斯混合罚模型聚类 李沐雨, 王 星 (163)
数据包络分析 SBM 超效率模型无可行解问题的两阶段求解法 钱振华, 成 刚 (171)
基于 SDA 结构分解的中国农村居民收入分析 1997–2007 李 晖, 陈锡康 (179)
具有因病死亡且输入为 Berverton-Holt 函数的离散 SIS 传染病模型分析 吴鹏飞, 端木京顺, 杜继永, 曹中红 (186)

- 纵向数据非参数模型的惩罚修正二次推断函数估计 赵明涛, 何晓群 (193)

研 究

- 环 $Z_p[u]/(u^{k+1})$ 上循环码的 Gray 象 梁 华, 唐元生 (200)
关于非齐次马氏过程散度的极限性质 汤 莹, 张 月, 杨卫国 (204)
参数不确定广义周期时变系统的鲁棒 H_∞ 控制 樊仲光, 梁家荣, 肖 剑 (210)
聚集数据线性模型参数的广义聚集 Liu 估计的相对效率 周永正 (219)
一类非线性偏差分方程组的频率振动性 杨 军, 王文志 (226)
带马尔可夫跳的随机 Hopfield 神经网络的以分布渐近稳定性 赵 雁 (234)
一类高阶两项微分方程的振荡原则 张茂柱, 李恭刚, 陈 睿 (240)
一类具脉冲效应的 p -Laplace 系统周期解的存在性 黎 丽, 陈 凯, 张琼芬, 刘永建 (247)
万维 Minkowski 空间中类空轴旋转曲面的分类 金明浩, 裴东河 (257)