

# 工 程 数 学 学 报

GONGCHENG SHUXUE XUEBAO

第 27 卷 第 4 期

## 目 录

临床试验不依从现象下相关数据的统计推断.....	戴 君 张忠占	(571)
误差为单位根过程的非参数回归模型均值变点的检测.....	齐培艳 田 铮 段西发	(584)
随机负债情形的信用违约互换定价.....	欧阳异能 徐 云	(593)
两两NQD序列下线性指数分布参数的经验 Bayes 检验.....	王 亮 师义民	(599)
$\alpha$ 混合序列下的核密度估计量的渐近正态性.....	赵 翌 杨善朝	(605)
使带权总完工时间为最小的自由作业排序问题.....	陈荣军 唐国春	(612)
图的最大二等分问题的秩二松弛算法的改进.....	张 芳 徐成贤	(621)
带回溯线搜索步的双子问题信赖域算法.....	唐明筠	(627)
一类新的记忆梯度法及其收敛性.....	汤京永 董 丽	(637)
线性乘性规划的全局优化算法.....	周雪刚 武 坤 曾海群	(643)
形状梯度法求解不可压缩流的形状优化问题.....	朱静涛 高志明 马逸尘	(652)
非线性常微分方程边值问题的最优化算法.....	侯祥林 钱 颖 吴海涛	(663)
二阶椭圆问题的最小二乘扩展混合有限元方法.....	丁 胜 陈焕贞	(669)
一类四阶常微分方程两点边值问题正解的存在性.....	陈天兰	(679)
一类具时滞和收获的捕食模型的稳定性与 Hopf 分支.....	田晓红 徐 瑞 王丽丽	(684)
复 Ginzburg-Landau 方程的数值模拟.....	裴琴娟 杨忍军 许秋滨	(693)
由自相似集生成强分离图递归集的算法.....	邓国泰 刘春苔	(699)
一类三次有理插值样条的逼近性质.....	刘 琳 唐月红	(704)
基于 $\alpha$ -型相对信息的模糊散度.....	兰 蓉 范九伦	(715)
关于随机时滞神经网络稳定性的注记(英).....	张子芳 徐道义	(720)
一类具离散时变时滞和分布时滞神经网络的指数稳定性(英).....	宋学力 彭济根	(731)
带脉冲的随机 Hopfield 型神经网络的 $p$ 阶矩稳定性(英).....	卢俊香 段献葆 付 蓉	(741)
三阶奇异边值问题对称正解的最优存在性(英).....	孙 彦 曾六川	(747)
Banach 格上的 b-AM-紧算子(英).....	程 娜 陈滋利	(753)
同一语言在不同进制下的正则性研究.....	孙旭清 吴庚申	(757)

# CHINESE JOURNAL OF ENGINEERING MATHEMATICS

Vol. 27 No. 4

## CONTENTS

Inference of Treatment Effects Based on Correlated Data from Randomized Trials with Non-compliance .....	Dai Jun Zhang Zhongzhan	(571)
Detecting Change-points in Mean of Nonparametric Regression Models with Unit-root Errors .....	Qi Peiyan Tian Zheng Duan Xifa	(584)
The Pricing of Credit Default Swap under Stochastic Liabilities .....	Ouyang Yineng Xu Yun	(593)
Empirical Bayes Test for Parameters of the Linear Exponential Distribution with NQD Random Samples .....	Wang Liang Shi Yimin	(599)
Asymptotic Normality of the Kernel Density Estimator for $\alpha$ -mixing Random Variables .....	Zhao Yi Yang Shanchao	(605)
Open Shop Problem to Minimize the Total Weighted Completion Time .....	Chen Rongjun Tang Guochun	(612)
Improvement on the Rank-two Relaxation Algorithm for the Graph Max-bisection Problem .....	Zhang Fang Xu Chengxian	(621)
A Trust-region Method with Two Subproblems and Backtracking Line Search .....	Tang Mingyun	(627)
A New Memory Gradient Method and its Convergence .....	Tang Jingyong Dong Li	(637)
A Global Optimization Algorithm for Linear Multiplicative Programming .....	Zhou Xuegang Wu Kun Zeng Haiqun	(643)
Function Space Parameterization Technique for Shape Optimization Problem of Incompressible Fluid .....	Zhu Jingtao Gao Zhiming Ma Yichen	(652)
Optimization Algorithm of Boundary Value Problem for Nonlinear Ordinary Differential Equations .....	Hou Xianglin Qian Ying Wu Haitao	(663)
Least-squares Expanded Mixed Finite Element Methods for Second-order Elliptic Problems .....	Ding Sheng Chen Huanzhen	(669)
Existence of Positive Solutions for a Class of Fourth-order Ordinary Differential Equations of Two-point Boundary Value Problem .....	Chen Tianlan	(679)
Stability and Hopf Bifurcation of a Predator-prey Model with Time Delay and Harvesting .....	Tian Xiaohong Xu Rui Wang Lili	(684)
Numerical Methods for the Complex Ginzburg-Landau Equation .....	Pei Qinjuan Yang Renjun Xu Qiubin	(693)
An Algorithm to Generate Directed-graph Sets with the SSC from Self-similar Sets .....	Deng Guotai Liu Chuntai	(699)
The Approximation Properties of a Cubic Rational Spline Interpolation .....	Liu Lin Tang Yuehong	(704)
Fuzzy Divergences Based on the Relative Information of Type $\alpha$ .....	Lan Rong Fan Jiulun	(715)
A Note on Stability of Stochastic Delay Neural Networks .....	Zhang Zifang Xu Daoyi	(720)
Exponential Stability of a Class of Neural Networks with Discrete Time-varying and Distributed Delays .....	Song Xueli Peng Jigen	(731)
The $p$ -moment Stability for Stochastic Hopfield-type Neural Networks with Impulses .....	Lu Junxiang Duan Xianbao Fu Rong	(741)
Optimal Existence Criteria for Symmetric Positive Solutions of Third-order Singular Boundary Value Problems .....	Sun Yan Zeng Liuchuan	(747)
b-AM-compact Operators on Banach Lattices .....	Cheng Na Chen Zili	(753)
The Regularity of a Language under Different Bases .....	Sun Xuqing Wu Gengshen	(757)