АННОТАЦИИ СТАТЕЙ НА АНГЛИЙСКОМ ЯЗЫКЕ

Guynoutdinova G.M., Greckova T.I. OPTIMAL CONTROL OF TAX PROCEEDS. The problem of optimal control of tax proceeds in limited time management in the case of one sector economics has been solved. Two spheres were observed: an internal – production sphere (enterprise) and external – nonproduction sphere (government) existing on taxes taken from production sphere. The neoclassical model of economic growth was used. The problem of optimal control is considered in final time space.

Keywords: tax deductions, optimal control, Pontryagin principle of the maximum.

Dombrovskii V.V., DombrovskiiD.V., Lyashenko E.A. DYNAMIC INVESTMENT PORTFOLIO OPTIMIZATION UNDER CONSTRAINTS. The investment portfolio management task under trading volume constraints is considered. The prices of risky financial assets are described by the stochastic difference equations with stochastic volatility. The investment portfolio management problem is formulated as a tracking task for some reference portfolio with desired return. We propose to use the model predictive control methodology in order to obtain feedback trading strategies.

Keywords: investment portfolio, forecasting strategies of management, optimization with restrictions.

Erohina E.A. CONTROL OF TRANSFORMING ECONOMICS. In this article is researching a demands to government's regulate of economics in transformation's period of development, conditions of degradation and destruction of national economy, who is bonding with mistakes in government of transforming national economy. Methodological base of this article is the system analysis and the conceptions of self-organization.

Keywords: system analysis, government regulation, transforming economy.

Perepelkin E.A. PROBLEM OF PARAMETRICAL SYNTHESIS OF MULTIVARIABLE DYNAMIC SYSTEM AS THE PROBLEM OF NONLINEAR PROGRAMMING. The problem of parametrical synthesis of multivariable dynamic system by criterion of a minimum of norm of system is offered to be solved as a problem of nonlinear programming. Results of calculations and numerical modeling for system of active control of a vehicle suspension system are discussed.

Keywords: parametric syntheses, norm of system, active control.

Smagin S.V. DYNAMICAL TRACKING CONTROL SYSTEM OFF OBJEKT OUTPUT WITH UNKNOWN DISTURBANCES. The algorithm of synthesis local-optimal tracking control system output by linear discrete object with unknown additive disturbances is considered. It is offered form the dynamic law of control.

Keywords: tracking control system, discrete object, dynamic control.

Stepanova N.V., Terpugov A.F. THE CONTROL OF RETAIL PRICE OF PERISHABLE GOODS. One considers the problem of the control of retail price of perishable goods, when it is necessary to bye it during fixed time.

Keywords: control price, maximization of the profit, duration of the sale.

Gorbenko K.A. NON-MARKOVIAN CUMULATIVE PROPERTY INSURANCE MODEL. In the resulted work the model of property insurance as system of mass service having the cumula-

tive entering stream and the recurrent time of service is offered and investigated. It is to be noted that each client can insure a quantity of the same objects. It means in terms of mass service theory that the entering stream is not ordinary.

Keywords: property insurance, non-markovian cumulative model, capital of companies.

Ovsyannikov S.N. Ovsyannikov M.S. COMPUTATION OF EQUIVALENT SOUND LEVELS OF NOISE POLLUTION ON RESIDENTIAL AREAS WITH THE METHOD OF RASTER MODELING WITH BACKWARD RAY TRACING. In article described two base methods of computational modeling of noise radiation in residential area of traffic flows. Authors offer alternate method of “Raster modeling with backward ray tracing”. There is algorithm and features of its realization. There is also labour-intensiveness.

Keywords: noise contamination, planning, backward tracing.

Koshkin G.M., Lakhodynov V.S. SEMI-RECURIVE IDENTIFICATION OF WEAKLY DEPENDENT FOLLOWER’S CONDIDIONAL FUNCTIONAL. The convergence in mean square semi-recursive estimate of a conditional functional, which is constructed by weakly dependent followers strong mixed, is investigate. The semi-recursive estimates are used for identification non linear autoregression different range. The problems of a prognosis of fund investment pay cost on a real date with make use of semi-recursive algorithms is solved.

Keywords: semi-recursive algorithms, conditional functional, nonparametric identification.

Poddubny V.V., Chervonnaya E.A. THE IDENTIFICATION OF DYNAMIC MARKET MODELS OF WALRASIAN TYPE WITH MANY GOODS. We consider the problem of identification of dynamic market model of walrasian type with many goods. The model is described by the system of differential equations with delays, which is solved concerning derivatives. The algorithm is based on the method of the least squares. We receive the computing structure of algorithm of identification of unknown system coefficients and unknown delays. Work of algorithm is illustrated by modeled numerical examples and an example of identification of the real market of one of kinds of computer accessories – video cards of various manufacturers.

Keywords: identification, dynamic models, market of walrasian type.

Shulenin V.P., Tabolzhin V.V. COMPARISON OF THE PROPERTIES OF THE RANK ANALOGUES F-TEST FISHER FOR DIFFERENT MODELS IN THE ANALYSIS OF VARIANCE. Small sample performance of the F-test Fisher, H-test Kruskal -Wallis and L-test Page are considered for different models in the analysis of variance. Asymptotic relative efficiency of tests is calculated for different models.

Keywords: rank criteria, analysis of variance, nonparametric models.

Babanov A.M., Skachkova A.S. GRAPHICAL NOTATION FOR ENTITY-RELATIONSHIP-MAPPING MODEL. Article is devoted to the description of the graphical notation for semantic data model «Entity-Relationship-Mapping». Graphical primitives used for representation of model elements are considered.

Keywords: semantic model, graphic primitives, graphic notation.

Kostyuk Yu.L., Pozhidaev M.S. APPROXIMATE ALGORITHMS FOR SOLUTION THE BALANCED PROBLEM OF K TRAVEL SALESMAN. Considering building k looped tours task on a set of n+1 towns with the minimal total length and with the same count of towns for each result tour (to within 1 town). One town called "base" should be included into each result tour and all other towns should be included into the only one tour of a result set. Offered and experimentally researched the several approximate algorithms for this task solution.

Keywords: problem travel salesman, algorithm cutting up route, dichotomic division.