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THE FUNDAMENTAL DEVELOPMENTS BRANCH
“COGNITIVE MODELING IN THE SOCIAL SCIENCES” (“OON”)
OF “SRI "SFA CMT" OF "RA(N)S" N. A. VENIAMINOV V.N.”

The developed “The fundamental developments branch
“Cognitive modeling in the social sciences”” (“OON”)
treats to the fundamental developments divisions
of “The scientific-research institute “System and financial analysis based on
cognitive modeling technology” of “RA(N)S” named after Veniaminov V.N.”
 (“SRI “SFA CMT” of “RA(N)S” n. a. Veniaminov V.N.” – SRI) as the first SRI
in the structure of “SIO “Academy of cognitive natural sciences”” (“SIO “ACNS””)
and the add. component of the system of science and education of the modern country
for the creation, distribution and use of the main and derivative
scientific results of the cognitive modeling technology (CMT) (www.vetrovan.(spb.)ru)
[see the fundamental developments branches and departments of SRI]:
1) it is executed by the principle of “administrative-economy submission”;
2) works in the several main directions, which allow to provide
the development of the fundamental main and derivative scientific results
(my second report on SRW from 2006-2008(9) y. was submitted
to “SPbSETU “LETI”” and “The Government of RF”
for the translation, carrying out of int. action and receiving of “The Nobel prize”);
3) includes the several various main divisions:
I. “The fundamental developments department
“Theory of social sciences, philosophy, science-study,
politics and political sciences, sociology,
(cognitive) psychology, state, law and jurisprudential sciences,
patenting business, invention and rationalization work”” (“SFPSPP”) (*)
*[the fundamental developments in the area
“Theoretical social sciences” –
theory and ideology of social sciences,
theory of history of social sciences,
theory of the modern condition of social sciences,
theory of scientific societies, conventions, congresses,
conferences and symposiums on the social sciences,
theory of international cooperation in the area of social sciences,
theory of the organization of scientific-research work in the area of social sciences,
theory of information work in the social sciences,
theory of the terminology of social sciences,
theory of the propagation and popularization of social sciences,
theory of the teaching of social sciences,
theory of mathematical modeling in the social and humanitarian sciences,
theory of the staff of social-scientists,
theory of the cognitive modeling technology
in the theoretical social sciences;*
*the fundamental developments in the area
“Theoretical philosophy” –
theory of the general problems of modern philosophy,
theory of general-philosophical problems, theory of logic,
theory of philosophy and methodology of science, theory of social philosophy,
theory of ethics, theory of aesthetics, theory of philosophy of religion and atheism,
theory of history of philosophy, theory of history of philosophy of science and society,
theory of the cognitive modeling technology
in the theoretical philosophy;*

the fundamental developments in the area “Theoretical science - study” – theory of the development of science, theory of science and society, theory of sociology of science, theory of scientific work and scientific creativity, theory of the organization of science, theory of politics in the area of science, theory of the technique and technics of scientific-research work, theory of economics of science, theory of scientific staff, theory of international cooperation in science, theory of science and scientific-research work in the separate countries, theory of the cognitive modeling technology in the theoretical science - study;

the fundamental developments in the area “Theoretical politics and political sciences” – theory of the methodology of political researches, theory of history of political doctrines, theory of political systems, theory of internal policy, theory of international relations, theory of external (foreign) politics and diplomacy, theory of the cognitive modeling technology in the theoretical politics and political sciences;

the fundamental developments in the area “Theoretical sociology” – theory of the general problems of modern sociology, theory of the methodology of sociology, theory of the technique and technics of sociological researches, theory of society as the system, theory of social relations and processes, theory of social classes, communities and groups, theory of sociology of the spheres of social life, theory of social phenomena and institutes, theory of sociology of personality and behavior, theory of historical and regional sociology, theory of applied sociology, theory of history of sociology, theory of the cognitive modeling technology in the theoretical sociology;

the fundamental developments in the area “Theoretical (cognitive) psychology” ()* – theory of general psychology, theory of psychology of development, theory of age psychology, theory of comparative psychology, theory of social psychology, theory of applied psychology, theory of the cognitive modeling technology in the theoretical (cognitive) psychology, theory of the modified stratified-step model of processing (cognitive psychology) of the content of information fragments, theoretical bases of cognitive psychology and the cognitive modeling technology, theoretical bases of the parametrical cognitive models block for the system analysis of the information-educational environments (the cognitive models of the subject of training and the means of training), theory of the ways of representation of the structure of the cognitive models and problem environments: the formal classical of the 0th generation (the logical and production models), the nonformal classical of the 0th generation (the semantic network, the frame network and ontology), the formal new of the 0th generation (the calculus of theory of sets and corteges on domains and the innovative calculus of theory of sets and graphs), the nonformal new of the 0th generation (the multi-level structural scheme and the multi-level encapsulated pyramids combining theory of graphs and theory of sets), the flat of the 1st generation (the cognitive circle and the cognitive disc), the volumetric of the 1st generation (the cognitive cylinder, the cognitive cone and the cognitive sphere), the flat and volumetric of the 2nd generation (the one-, two-, three-, four-, five- and more cognitive circle, cognitive disc, cognitive cylinder, cognitive cone and cognitive sphere), the hybrid of the 3rd generation (the combinations of the existing cognitive models),

theory of the adaptive automation means of the information-educational environment (the basic and applied diagnostic module, the electronic textbook, the laboratory practical work, the electronic dean, the electronic library and others), theory of the technical means of support of the adaptive information interaction (the adaptive representation of sequence of information fragments processor, the question-answers structures sequence processing processor, the linguistic processor and other processors), theory of the technical means of support of the complex analysis (the automation means of formation and research of the psychological parameters of the cognitive model in the view of the cognitive circle, cognitive disc, cognitive cylinder, cognitive cone, cognitive sphere, one-, two-, three-, four-, five- and more cognitive sphere and others); *the fundamental developments in the area "Theoretical state management, law and jurisprudential sciences"* – theory of state and law, theory of history of state and law, theory of history of political and legal doctrines, theory of constitutional (state) law, theory of municipal law, theory of administrative law, theory of information law, theory of financial law, theory of entrepreneurial law, theory of civil law, theory of civil-procedural law (civil process), theory of arbitration-procedural law (arbitration process), theory of patent law, theory of the law of industrial property, theory of copyright and adjacent rights, theory of succession law, theory of family law, theory of agrarian law, theory of the legal problems of environment preservation, theory of ecological law, theory of land law, theory of forestry law, theory of water law, theory of air-protection law, theory of legislation about bowels, theory of legislation about fauna world, theory of labor law, theory of the law of social welfare, theory of law-enforcement-authorities, theory of criminal law, theory of criminal-procedural law (criminal process), theory of criminology, theory of criminal-executive law, theory of penitentiary, theory of criminalistics, theory of judicial statistics, theory of international law, theory of international private law, theory of state and law of the separate countries, theory of the cognitive modeling technology in the theoretical state management, law and jurisprudential sciences; *the fundamental developments in the area "Theoretical patent business, invention and rationalization"* – theory of patent-information activity, theory of invention and rationalization, theory of patent-license work, theory of the technical-economic analysis on patent materials, theory of invention law, theory of the cognitive modeling technology in the theoretical patent business, invention and rationalization].

II. “The fundamental developments department
Theory of economics and economic sciences,
organization, management, statistics and the financial analysis
based on the cognitive modeling technology” (“SE”) (*)
*[the fundamental developments in the area
“Theoretical economics and economic sciences”* –
the economic theories, theory of history of economic idea,
theory of accounting-economic sciences, theory of science of the management of economics,
theory of economic history, theory of the world economy,
theory of international economic relations,
theory of economic development and growth,
theory of the prediction and planning of economics,
theory of economic cycles and crises,
theory of productive forces and scientific-technical progress,
theory of the social-economic structure,
theory of the reproduction structure of economics,
theory of accumulation and consumption, theory of well-being,
theory of the territorial structure of economics,
theory of regional and city economics, theory of the branch structure of economics,
theory of financial science, the monetary and tax theories,
theory of the credit-financial institutes,
theory of the cognitive modeling technology
in the theoretical economics and economic sciences;
*the fundamental developments in the area
“Theoretical organization and management”* –
theory and methodology of management,
theory of the state and administrative management,
theory of organization of the management of economics, theory of social management,
theory of prediction, theory of futurology,
theory of strategical management, theory of strategical planning,
theory of the cognitive modeling technology
in the theoretical organization and management;
*the fundamental developments in the area
“Theoretical statistics”* –
theory of general statistics, theory of economic statistics,
theory of branch statistics, theory of social statistics,
theory of international statistics,
theory of statistics of the separate countries and social-economic systems,
theory of the organization and management of statistics,
theory of the methods and means of data mining,
processing and the analysis of statistical information,
theory of the cognitive modeling technology
in the theoretical statistics;

the fundamental developments in the area “The theoretical financial analysis, monetary circulation and credit” ()* – theory of tendencies, dependences and laws of the financial analysis of the objects, processes and phenomena, theory of the system, information and cognitive approaches in economics, theory of the structure and dynamics of functioning of the financial market, theory of the global purposes of standardization of the accounting and the problems of unification of the financial and accounting reporting-documentation, theory of the institutional subjects regulating the creation, distribution and use of the international standards, theory of the principles of creation, distribution and use of the international standards of financial and accounting reporting-documentation, theory of the basic methods of transformation of the financial reporting-documentation, theory of formation of the accounting balance by the international standards of financial reporting-documentation, theory of qualifying tests of the professional participants of the financial market of the financial system of the country, theory of the administrative-legal forms of existence of the managing subject, theory of the features of procedure of the financial analysis of the managing subject, theory of the organizational structure of enterprise and its features (the educational establishment of the system of education and the information-educational environment), theory of the inflationary depreciation, discounting and compounding of monetary streams in the economic system of the country, theory of the indexes of dynamics of the financial market and tools, theory of dynamics and communications of the managing subject, theory of investment and innovative politics of the managing subject in the financial system of the modern country, theory of the organizational, technological, scientific, methodical, normative-legal, information, hardware, software, brainware, raw, warehouse, personnel and economic preparations of production and the bases of the financial analysis and estimation of quality of activity of the credit and other organization, theory of the requirements and structure of financial reporting-documentation of the (non)production organizational structures, theory of the additional elements of accounting and financial reporting-documentation of the credit organization, theory of the consumers of financial reporting-documentation, theory of the elements of financial reporting-documentation connected with the changes of financial-economy activity, theory of the simple and consolidated accounting and financial reporting-documentation, theory of the methods of the financial analysis of the different forms of reporting-documentation, theory of the structure of accounts of the accounting and financial analysis, theory of the vertical, horizontal and trend financial analysis based on the analytical coefficients system, theory of the scheme of carrying out of the auditor check-inspection, the financial analysis and audit, theory of the external and internal control of activity of the different organizations, theory of the kinds of bank operations of the (credit) organization and enterprise, theory of the structure of the accounting balance (form №1), theory of the structure of the explanatory note to the accounting balance, theory of the structure of the report about profits and losses (form №2), theory of the structure of the explanatory note to the report about profits and losses, theory of the structure of the report about the change of capital (form №3), theory of the structure of the report about the movement of monetary resources on accounts (form №4), theory of the structure of the explanatory note to the report about the movement of means, theory of the structure of the appendix to the accounting balance (form №5), theory of the structure of the report about the target use of received means (form №6), theory of the structure of the auditor conclusion about the results of activity of the enterprise, (credit) organization, organization of The Federal reserved system of USA,

theory of the analysis of stability of the credit organization and commercial bank, theory of the basic analytical coefficients of the financial analysis, theory of the structure of the accounting balance and the report about profits and losses of the enterprise for the introduction of the analytical coefficients system, theory of the cognitive modeling technology with dynamic cloning, verification and subverification, theory of the iterative cycle and the technique of use of the cognitive modeling technology, theory of the technique of formation of the normative-legal and information basis for the financial analysis of the (credit) organization and enterprise, theory of the technique of additional check of the information basis of the financial analysis of the (credit) organization and enterprise, theory of the technique of creation and modification of the working plan of accounts and the model of accounting, theory of the technique of carrying out of the financial analysis of the condition of organization, theory of the parametrical cognitive models block for the financial analysis and the increase of efficiency of functioning of the objects, processes and phenomena, theory of the structure of the cognitive models for the vertical, horizontal and trend financial analysis of the (credit) organization and enterprise, theory of the ways of representation of the structure of the cognitive models and problem environments (the formal and nonformal classical and new of 0th generation, the flat and volumetric of the 1st generation and 2nd generation and the hybrid of the 3rd generation), theory of the algorithm of formation of the cognitive model structure, theory of the technique of research of the cognitive model parameters, theory of the algorithm of analysis of a posteriori results of research, theory of formation and calculating of the aggregates of accounting balance of the production and nonproduction organization, theory of the calculation of parameters of the cognitive models for the vertical, horizontal and trend static and dynamic financial analysis of the (credit) organization and enterprise in the conditions of definiteness and uncertainty, theory of software for the automation of research tasks, theory of the statistical substantiation of practical use of the received results, theory of the factors influencing to the efficiency of functioning of the (credit) organization and enterprise in the economic system, theory of organization and plan of carrying out of the experiment, theory of the research of parameters of the cognitive models for the vertical, horizontal and trend financial analysis, theory of preliminary processing of a posteriori results of diagnostics, theory of choice of the statistical analysis methods of the generated data sets, theory of the analysis of dynamics of the resultativity of financial-economy activity, theory of the dispersion, regression, discriminant, cluster analysis, multidimensional scaling, factor analysis and bibliographic lists; *the fundamental developments in the area "Theoretical other branches of economics"* – theory of the production of musical instruments, theory of the production of art products, theory of jeweler industry, theory of the production of toys, theory of the production of sports products, theory of the production of writing goods, theory of the cognitive modeling technology in the theoretical other branches of economics].

The fundamental developments branches and departments of SRI allow to develop the main and derivative scientific results of CMT.