

Program on Monday 11 December 2017

09:00-09:15 WELCOME BEGRÜSSUNG ПРИВЕТСТВИЕ 欢迎

Jochen MAU May Иван 毛有成,

Initiator Biokybernetik инициатор биокибернетики 生物控制论主动

iqmeth Institut für Quantitative Methodik - Privates Akademisches Beratungsbüro für Forschung und Entwicklung

SESSION ON SOCIETY AND BEHAVIORAL CONTROL

09:15-09:45

Tatiana MOISEEVA Мусеева Татьяна, PhD(Econ), Scientific Secretary, Lecturer, Institute for Control of Complex Systems of Russian Academy of Sciences (ICCS RAS), Samara, Russia:

Evergetics: Orientation on persons and their values.

09:45-10:30

Theodor KALVERAM, DrSc, Professor (em) Psychology Heinrich Heine University Düsseldorf, and

Scientific Collaborator, Institute of Sports Sciences, Darmstadt University of Technology, Darmstadt, Germany:

'Self'-'Other' differentiation - a prerequisite for 'human'-'robot' cooperation? A contribution to behavioral cybernetics.

10:30-11:00 Morning Break

SESSION ON METHODOLOGY OF MODELLING AND DATA ANALYSIS

11:00-11:45

Dmitry FEDOSOV Федосов Дмитрий, DrSc, Research Staff Member, Group of Theoretical Soft Matter and Biophysics, Institute of Complex Systems, Research Center Jülich, Jülich, Germany:

Modeling blood flow.

11:45-12:30

Alexander CHURILOV Чурилов Александр, Dr.Sc., Professor

Department of Theoretical Cybernetics, Faculty of Mathematics and Mechanics, Saint Petersburg State University, Saint Petersburg, Russia:

Pulse modulation and its application to modeling hormonal homeostasis.

12:30-13:45 Lunch Break

13:45-14:30

Stefan WAGENPFEIL, DrSc, Professor & Chair, Director of Institute of Medical Biometry, Epidemiology and Medical Informatics, Saarland University Hospital, Homburg-on-Saar, Germany:

Parameter estimation considering uncertainty in model selection.

14:30-14:45 Brief After-Lunch Break for Tea and Coffee

14:45-15:15

Caspar KRAMPE, MSc./Laurea Magistrale, Research Staff Member

Chair of Business Management, in particular Marketing, School of Economics, Heinrich Heine University, Düsseldorf, Germany:

Human behavior on markets - Insight from 'shopper neuroscience'.

15:15-15:45

Jian LI 李剑, PhD, Researcher

Institute for Medical Informatics, Biometry and Epidemiology (IBE), School of Medicine, Ludwig-Maximilians University, Munich, Germany:

Computational modeling of methionine cycle-based metabolism and DNA methylation and the implications for anti-cancer drug response prediction.

15:45-16:15

Chuong NGO NGUYEN, Dipl.-Ing., DrEng student (Prof. Dr.-Ing. Dr.med. S. Leonhardt)

Philips Chair of Medical Information Technology, Helmholtz Institute for Biomedical Engineering, RWTH Aachen University, Germany:

Object-oriented cardiorespiratory modeling.

16:15-16:45 Afternoon Break

16:45-17:15

Berno J. E. MISGELD, DrEng., Senior Scientific Engineer,

Philips Chair for Medical Information Technology, Helmholtz-Institute for Biomedical Engineering, RWTH Aachen University, Aachen, Germany:

Type 1 diabetes-glucose metabolism modelling and optimal online model selection

17:15-17:45

Johannes DIETRICH, DrSc, Dr. med., MD, Lecturer, Senior Physician, Head of Laboratory of Endocrine Research Medical Hospital I, Bergmannsheil University Hospital of Ruhr University Bochum, Bochum, Germany.

The concept of allostasis: A new paradigm at the frontier between health and disease.

18:00-19:00 Special Lecture at XCMG European Research Center

Oliver-Carlos GÖHLER, DrEng, Managing Director

XCMG Europe Ltd., Krefeld-Fichtenhain, Germany

Function-oriented approaches in development of driving technology for construction machines.

19:00 Departure from XCMG

19:30-22:00

Social Dinner “A Celebration of 10 Years Quantitative Medicine” in seasonal decoration

Location: Rheinhotel Vier Jahreszeiten, Meerbusch-Langst (Kierst)

22:00 – 22:30 Return to hotels

Program on Tuesday 12 December 2017

PATHO-BIOKYBERNETIK

09:00-11:15 Tutorial – Part I and Part II (10:00-10:15 Brief Break for Tea or Coffee)

Guanyu WANG 王冠宇, Associate Professor of Biology, DrEng, Dr rer medic (Cologne, Germany)

Department of Biology, School of Life and Health Sciences, South China University of Science and Technology (SUSTC), Shenzhen, China:

Disorders of multi-scale control.

11:15-11:45 Morning Break

11:45-12:30

Nicole RADDE, DrSc, Professor,
Institute of Systems Theory and Automatic Control (IST), Stuttgart University, Stuttgart,
Germany:

From heterogeneous data of biological systems to quantitative predictive models.

12:30-13:30 Lunch Break

13:30-14:15

Olga PANINA Панина Ольга, Professor, DrSc, MD, Head of Department of Obstetrics and
Gynaecology, Faculty of Fundamental Medicine, Lomonosov Moscow State University,
Moscow, Russia:

Female reproduction failure: Biological, social and management factors.

14:15-14:45 Brief After-Lunch Break for Tea or Coffee

14:45-15:30

Jochen MAU, DrSc, Full Professor (em) Statistics and Biomathematics in Medicine, past
Director of Institute of Statistics in Medicine, Heinrich Heine University Hospital, Düsseldorf,
Germany, and

iqmeth Institut für Quantitative Methodik, Krefeld, Germany:

*From macro to micro: On dynamics of the holistic function-level concept of human body
system.*

15:30-16:15

Sergey BOGOMOLOV Богомолов Сергей Professor, DrSc, Department of Computational
Methods, Faculty of Computational Mathematics and Cybernetics, Lomonosov Moscow State
University, Moscow, Russia:

From micro to macro. Computational point of view.

16:15-16:45 Afternoon Break

16:45-17:30

Igor YADYKIN Ядыкин Игорь Professor, DrSc, Chief of Laboratory of Methods and Hardware
for Structural Analysis, Control and Scientific Forecasting of Objects State, Trapeznikov
Institute of Control Sciences of Russian Academy of Science, Moscow, Russia:

*On the usage of energy functionals for the detection of the anomalies in the energy balance of
human body organs.*

17:30-17:45 Final Discussion, Outlook into 2018

17:45-18:00 Farewell and Closure

Abstracts

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