

INVITED SESSION SUMMARY

Title of Session: Models in Smart System Theory and Practice (MSTP)

Name, Title and Affiliation of Chair:

Professor Natalia A. Serdyukova, Russian Customs Academy, Komsomolsky prospect 4, Moscow region, Lyubertsy, 140015, Russia

Professor Lakhmi C. Jain, PhD | ME | BE(Hons)| Fellow (Engineers Aust), Founder KES International | <u>http://www.kesinternational.org/organisation.php</u>

Details of Session (including aim and scope):

Digital transformation processes spreads onto almost all spheres of our society, combining real and virtual worlds. Modern digital transformation is the next stage of the implementation of mathematics into practice, which began with the advent of mathematics and its close connections with the expressive features of language, i.e. with linguistics.

The following topics are of importance:

- Problems, connected with modern digital transformation philosophy and digital transformation verbal models in Smart E-Learning System Theory and Practice:
 - Areas of application of smart systems;
 - Problems in creating and using smart systems;
 - Models transfer methods in Smart System theory and practice and examples of their usage in practice;
 - Linguistic aspects of problem of mathematical models' construction of transferring content components between subject areas connected with mathematical logic and examples of their usage in practice;
- Problems, connected with modern digital transformation technics and mathematical methods:
 - Algebraic and Mathematical logic models and methods and examples of their use in practice in Smart System theory and practice,
 - Geometric methods of Smart System theory and practice and examples of their usage in practice;
 - Graph theory methods in Smart System theory and practice and examples of their usage in practice;
 - Category theory methods in Smart System Theory and Practice and examples of their usage in practice;
 - Probability theory and Statistics methods in Smart System theory and practice and examples of their usage in practice;
 - Information bases for improving the efficiency of smart systems;
 - Methods for evaluating the effectiveness of smart systems;

Research papers are invited in all areas related to the Models in Smart System theory and practice.

Timelines:

- > 31st March 2025 Paper submission deadline
- 5th May 2025 Notification to the corresponding author
- 2nd June 2025 Camera-ready paper due

Main Contributing Researchers / Research Centres (tentative, if known at this stage):

- Russian Customs Academy, Komsomolsky prospect 4, Moscow region, Lyubertsy, 140015, Russia
- Bauman Moscow State Technical University
- HSE University Moscow
- Politehnica University of Timisoara

Website URL of Call for Papers (if any):

Email & Contact Details:

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