

# **СЕМИНАР**

## **„АЛГЕБРА И ЛОГИКА”**

Драги колеги,

**Следващото заседание на семинара ще се проведе  
на 15 септември 2017 г. (петък) от 11:00 часа  
в зала 578 на ИМИ – БАН.**

**Доклад на тема**

### **Synthesis of Petri Nets with Whole-place Operations and Localities**

**ще изнесе**

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Newcastle University, Newcastle upon Tyne, UK).**

Поканват се всички желаещи.

От секция „Алгебра и логика” на ИМИ – БАН

<http://www.math.bas.bg/algebra/seminarAiL/>

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#### **Abstract**

Synthesising systems from behavioural specifications is an attractive way of constructing implementations which are correct-by-design and thus requiring no costly validation efforts. In this talk, systems are modeled by Petri nets and the behavioural specifications are provided in the form of step transition systems, where arcs are labeled by multisets of executed actions. We focus on the problem of synthesising Petri nets with whole-place operations and localities (WPOL-nets), which are a class of Petri nets powerful enough to express a wide range of system behaviours, including inhibition of actions, resetting of local states, and locally maximal executions.

The synthesis problem was solved for several specific net classes and later a general approach was developed within the framework of tau-nets. In this talk, we follow the synthesis techniques introduced for tau-nets that are based on the notion of a region of a transition system, which we suitably adapt to work for WPOL-nets.