

# СЕМИНАР „АЛГЕБРА И ЛОГИКА”

Драги колеги,

Следващото заседание на семинара ще се проведе  
на 23 октомври 2015 г. (петък) от 11:00 часа  
в зала 578 на ИМИ – БАН.

Доклад на тема

## **Model Checking of Mobile Systems Using Net Unfoldings**

ще изнесе

**Prof. Maciej Koutny**

**(University of Newcastle upon Tyne, U. K.).**

Поканват се всички желаещи.

От секция „Алгебра и логика” на ИМИ – БАН

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

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### **Abstract**

Mobility is a central feature of many distributed systems, and is often modelled using process algebras; in particular, the pi-calculus. A well-established method of verifying the correctness of such models has been model-checking which is completely automatic, and so particularly attractive in industrial context. However, mobile systems are highly concurrent causing state space explosion when applying model-checking techniques. To cope with this problem, techniques based on partial order semantics of concurrency can be used. The talk discusses how model-checking based unfoldings of Petri nets could be used to verify pi-calculus terms. The talk describes a prototype tool based on theoretical translation and an existing efficient Petri net unfold and verifier. It also presents experimental results in support of specific design choices.