

# СЕМИНАР

## „АЛГЕБРА И ЛОГИКА”

Драги колеги,

Следващото заседание на семинара ще се проведе  
на 17 ноември 2017 г. (петък) от 13:00 часа  
в зала 578 на ИМИ – БАН.

Доклад на тема

### ***n*-Tuple semigroups**

ще изнесе

**Anatolii V. Zhuchok (Luhansk Taras Shevchenko National  
University, Starobilsk, Ukraine).**

Поканват се всички желаещи.

От секция „Алгебра и логика” на ИМИ – БАН

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

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#### **Abstract**

An  $n$ -tuple semigroup is an algebraic system consisting of a set with  $n$  binary associative operations satisfying certain equations.  $n$ -Tuple semigroups play a prominent role in the theory of non-associative rings and algebras. They are a generalization of semigroups and have relationships with such algebraic structures as interassociative semigroups, restrictive bisemigroups, doppelsemigroups and trioids.

Examples of  $n$ -tuple semigroups are given and the independence of axioms of an  $n$ -tuple semigroup is established. Elements of the variety theory of  $n$ -tuple semigroups are outlined.  $n$ -Tuple semigroups which are free in the variety of  $n$ -tuple semigroups are constructed and the least congruences on free  $n$ -tuple semigroups are investigated. The free product of  $n$ -tuple semigroups is presented and its structure is described. Automorphism groups of constructed free algebras are characterized.