СЕМИНАР
„АЛГЕБРА И ЛОГИКА”

Драги колеги,

Следващото заседание на семинара ще се проведе
на 27 май 2016 г. (петък) от 11:00 часа
в зала 578 на ИМИ – БАН.
Доклад на тема

Semigroups of sets of *n*-ary Boolean operations

ще изнесе

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(Institut für Mathematik der Universität Potsdam, Germany).

Поканват се всички желаещи.

От секция „Алгебра и логика” на ИМИ – БАН

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

Abstract:

Any *n*-ary Boolean operation can be regarded as a transformation on the set of *n*-tuples, where the image is in a two-element set. Hence, the set of all *n*-ary Boolean operations corresponds to a set of transformations. Under the composition of transformations, this set forms a semigroup which is called transformation semigroup with restricted range. On the other hand, one can define an associative binary operation on the set of all *n*-ary Boolean operations based on the composition operator. This provides again a semigroup being isomorphic to a semigroup with restricted range, which is already well studied. It is well known that the complex product is an associative operation on power set of the transformations with restricted range. In this presentation, we will discuss this semigroup. In particular, we determine their idempotent and regular elements. Further, we characterize the (maximal) regular subsemigroups, the largest semiband, and the (maximal) idempotent subsemigroups.

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