

СЕКЦИЯ

„АЛГЕБРА И ЛОГИКА”

Драги колеги,

На 5 май 2023 г. (петък) от 13:00 часа ще се проведе
встъпителна академична лекция на

проф. Йорг Копиц (ИМИ-БАН)

на тема

Algebraic Properties of Transformation Semigroups

Лекцията ще се проведе посредством платформата **Zoom** и всеки
желаещ може да се присъедини като последва линка, зададен на
страницата на семинара по „Алгебра и логика”.

От секция „Алгебра и логика” на ИМИ – БАН

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

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Abstract:

Each semigroup is isomorphic to a semigroup of transformations on a suitable set (Cayley Theorem for semigroups). If we know generating sets of minimal size (rank) of a finitely generating semigroup then we have important information about the algebraic structure of the semigroup itself. For not finitely generated semigroups, we consider relative generating sets of minimal size modulo a given subset of the semigroup (relative rank). We determine the (relative) rank of several semigroups of transformations. These semigroups were already considered by other authors.

By the study of congruences on a semigroup, we obtain further important information about the structure of a given semigroup, which are related to its ideals. We discuss the congruence lattice of an infinite transformation semigroup as well of the maximal nilpotent subsemigroups of the Catalan Monoid.