

СЕКЦИЯ

„АЛГЕБРА И ЛОГИКА”

Драги колеги,

На 20 май 2022 г. (петък) от 16:00 часа ще се проведе дистанционно заседание на семинара по „Алгебра и логика”.

Доклад на тема

Bootstrap percolation: merging operations for polytopes

ще изнесе

Ivailo Hartarsky (Université Paris-Dauphine, PSL, France and visiting scholar at Instituto de Matemática Pura e Aplicada, Rio de Janeiro, Brazil).

Семинарът ще се проведе посредством платформата **Zoom** и всеки желаещ може да се присъедини като последва линка, зададен на страницата на семинара.

От секция „Алгебра и логика” на ИМИ – БАН

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

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Abstract

Bootstrap percolation is a group of statistical physics models intensively studied since the 1970s in mathematics, physics, computer science, as well as social sciences. They are cellular automata generalising the following paradigmatic example. Arbitrarily declare some sites of Z^2 initially infected. Iteratively, at each discrete-time round, additionally infect each site with at least 2 infected neighbours.

The last decade has seen the accomplishment of a full classification of all such models into ‘universality classes’, depending on their behavior when few sites are initially infected. In this talk, we will overview universality results, mostly in two dimensions. We will focus particularly on a key aspect of the proof of the lower bounds for the

`critical' class. That is a natural polygon merging procedure to be discussed in detail.

No prerequisites (particularly in probability) are required, as we will exclusively focus on the combinatorial side of the subject, which is completely elementary.