

СЕКЦИЯ

„АЛГЕБРА И ЛОГИКА”

Драги колеги,

На 29 октомври 2021 г. (петък) от 17:00 часа ще се проведе дистанционно заседание на семинара по „Алгебра и логика”.

Доклад на тема

Tropical Geometry and the Commutative Algebra of Semirings

ще изнесе

Kalina Mincheva (Tulane University, New Orleans, USA).

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/>

=====

Abstract

Tropical geometry provides a new set of purely combinatorial tools, which has been used to approach classical problems. In tropical geometry most algebraic computations are done on the classical side - using the algebra of the original variety. The theory developed so far has explored the geometric aspect of tropical varieties as opposed to the underlying (semiring) algebra and there are still many commutative algebra tools and notions without a tropical analogue. In the recent years, there has been a lot of effort dedicated to developing the necessary tools for commutative algebra using different frameworks, among which prime congruences, tropical ideals, tropical schemes. These approaches allows for the exploration of the properties of tropicalized spaces without tying them up to the original varieties and working with geometric structures inherently defined in characteristic

one (that is, additively idempotent) semifields. In this talk we explore the relationship between tropical ideals and congruences and what they remember about the geometry of a tropical variety.