

Ponedjeljak, 20.04. 2026. u 11:00, Galerija nauke i tehnike SANU, Đure Jakšića 2
Dr Tiago Hirth, CIUHCT, Univerzitet u Lisabonu; Associação Ludus

MATHEMATICAL GAMES AND HOW TO PLAY THEM

David Hilbert famously remarked: “Mathematics is a game played according to simple rules with meaningless marks on paper”. In this session, we take the inverse approach—transitioning from the play of games to the rigor of mathematics. We will explore a curated set of abstract games featured in the Portuguese Mathematical Games Championship, a tradition that has captivated students since 2004. Through games such as Hex, Produto, and Dots-and-Boxes, participants will move beyond the rules to uncover the underlying mathematical structures. If time permits, we will provide an introductory look at Combinatorial Game Theory (CGT) to formalize these strategies. Everyone will have the opportunity to learn not just how to play, but how to think strategically and mathematically. Join us for a session of friendly competition and “minds-on” discovery.

Utorak, 21.04.2026. u 12:15, Galerija nauke i tehnike SANU, Đure Jakšića 2
Dr Tiago Hirth, CIUHCT, Univerzitet u Lisabonu; Associação Ludus

BOREL, PETROVIĆ AND THE SPHINX, MATHEMATICS IN GAMES

In the interwar period of the 1930s, the Francophone world hosted a vibrant community of recreational mathematicians centered around the seminal journal *Sphinx: Revue mensuelle des questions récréatives*. Far from mere diversions, these “mathematical games” served as a fertile laboratory for burgeoning concepts in strategic thought. This talk explores the unexpected contributions of two giants of the era: Émile Borel and Mihailo Petrović (Alas). In this presentation, we will explore their more ludic contributions to mathematics which overlap with these scenes, framing their specific impact on the fields of recreational mathematics and mathematics in games. By tracing parallels to modern actors in these areas, both in France and Serbia, we will examine how this interwar legacy continues to shape mathematical culture, revisiting “hands-on-minds-on” practical examples, exploring the mechanics of Mathematics in Games.

Ponedeljak, 27.04.2026. u 12:15, Galerija nauke i tehnike SANU, Đure Jakšića 2

Dr Laurent Mazliak, Sorbonne Université, Pariz

THE MATHEMATICS OF ÉMILE BOREL IN THE TRANSITION BETWEEN THE 19th AND 20th CENTURIES

In my presentation, designed as a complement to the Borel exhibition presented for the first time in Serbia, I will attempt to show the singular way in which Émile Borel, based on his studies of the structure of real numbers and a certain rejection of Cantor's abstract and logical vision, found in probability theory an adequate tool for formulating a new approach to certain problems of mathematical existence. At the same time he became aware of the usefulness of probabilities for approaching important aspects of modern physics and for studies of society problems involving the question of risk. Borel was thus, at the beginning of the 20th century, the initiator of modern probability theory, which he considered to be the most essential part of mathematics for the contemporaneous citizen.

Ponedeljak, 27. april 2026. u 13:15, Galerija nauke i tehnike SANU, Đure Jakšića 2

Dr Snežana Lawrence, Middlesex University, London

CHALLENGING THE MINIMAX: FRÉCHET, BOREL, AND THE FOUNDATIONS OF GAME THEORY

When Maurice Fréchet succeeded Émile Borel at the Sorbonne as Chair of the Calculus of Probabilities and Mathematical Physics, he inherited not only mathematical work and lineage but a set of questions relating to the curriculum and work of Borel. One of the questions that interested him was Borel's work in the mathematical foundations of strategic behaviour. In this talk we pay particular attention to the episode of Fréchet's article about the Minimax Theorem in 1953, and the dispute that ensued between Fréchet and John von Neumann about the name and origin of this theorem. This talk will present mathematics in a manner that is accessible to non-specialists and will offer an insight into the socio-political context of the times, cooperation networks between mathematicians after WWII, and the spread of mathematical ideas. This context can, itself, be viewed as a strategic dynamic in the field of mathematical profession of the 1950s.