



Kurt Gödel (died January 14, 1978)



Alfred Tarski (born January 14, 1901)

Friday, January 12, 2024

Mathematical Institute of the Serbian Academy of Sciences and Arts is proud to announce a special session of the Seminar for Mathematical Logic celebrating the World Logic Day. The Logic Day Lecture (in English) will be delivered by Professor Silvia Ghilezan.



Time: 2.15 pm CET (Belgrade) [live stream](#)

Silvia Ghilezan

University of Novi Sad and
Mathematical Institute SASA, Belgrade

Proofs-as-computations paradigm new challenges

Abstract.

The formulae-as-types and proofs-as-computations correspondence, also known as the Curry-Howard correspondence, is a foundational concept that connects logic and computation. This correspondence establishes a deep connection between logical reasoning and computational processes. The origins of this idea can be traced back to the relationship between intuitionistic logic, lambda calculus, and combinatory logic. Its extension to various logical and computational frameworks highlights its versatility and broad applicability across different domains of computer science and mathematics.

Due to this two-way correspondence the interplay between developments in logic and computation continues to shape both fields. In this talk, we focus on novel Kripke-style semantics of computation and the logical background of specification and verification in the context of orchestrating federated (machine) learning algorithms.

Time: 3.15 pm CET (Belgrade) [live stream](#)

Presentations of recently defended doctoral thesis in logic and related fields.



Katarina Maksimović

Faculty of Philosophy, University of Belgrade

Intensionality and the notion of algorithm



Nedeljko Stefanović

University of Novi Sad, Novi Sad

Applications of the forcing method to proving combinatorial theorems