



# PŘEDNÁŠKOVÁ SÉRIE LECTURE SERIES

Lukas Kob (IP CAS)

## The Two Factor Approach to Consciousness in Substrate- hybrid Systems

The debate between computational functionalism and biological naturalism overlooks an important possibility: substrate-hybrid systems. These coupled systems consist of one silicon-based part and one biology-based part. Recent advances in brain organoid research support the feasibility of creating such systems. In this talk, I will discuss the implications of potential substrate-hybrid systems for conscious artificial intelligence, particularly from the perspective of biological naturalism. I will argue that the prospect of consciousness in these systems hinges on whether a so-called two-factor view is adopted, which distinguishes the neural correlates of consciousness from the neural correlates of content. I will align the two-factor view with two specific hybrid-system scenarios. In a scenario in which organoids control silicon-based computations, I will conclude that two-factor theories of consciousness are consistent with the emergence of consciousness in these systems. Conversely, hybrid systems that simply outsource computations from silicon to biological computers will only be conscious based on one-factor theories of consciousness. Considering substrate-hybrids helps us not only to estimate their technical feasibility, but also improves our understanding of the relationship between consciousness and its substrate.

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Meeting room, Institute of Philosophy, Czech Academy of Sciences, Jilská 1, Prague