▶ MARCIN SABOK, *Impossibility results in dynamical systems.*
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The goal of this talk will be to explain how the framework of descriptive set theory and the theory of Borel equivalence relations can provide impossibility results for problems in dynamical systems. We will start with an overview of the theory of countable Borel equivalence relations and we will see how it applies to classification problems in symbolic dynamics. In particular, we will discuss Problem 32 of Rufus Bowen asking for a classification of symbolic systems with the specification property. First, we will first see that such classification is impossible using concrete invariant. Then we will see several stronger phenomena that show impossibility of classification even with weaker invariants. Towards the end we will also see how the methods from dynamical systems can be used in solving problems in the theory of Borel equivalence relations.