An inference rule
\[ \varrho = \frac{\varphi_1, \ldots, \varphi_n}{\psi} \]
is admissible in a logic \( L \) if the set of theorems of \( L \) is closed under substitution instances of \( \varrho \), and it is derivable in \( L \) if it belongs to the usual consequence relation of \( L \). In classical logic, admissible and derivable rules coincide, but nonclassical logics often admit rules which are not derivable. This leads to many natural problems: description of admissible rules of \( L \), decidability of admissibility in \( L \), bases of admissible rules (i.e., axiomatization of admissible rules as a consequence relation), etc.

Admissible rules have been intensively studied for some modal and superintuitionistic logics (see e.g. [4, 1, 2, 3, 5]), but not much is known for other nonclassical logics. In this talk, we will consider admissibility in \( \mu \) Lukasiewicz propositional logic (\( \mu L \)). We will provide a characterization of admissible rules of \( \mu L \), which shows that admissibility in \( \mu L \) is decidable. We show a \( PSPACE \) upper bound on its computational complexity. We find a simple basis of admissible rules of \( \mu L \), and prove that there is no finite basis. All our results apply more generally to admissibility of multiple-conclusion rules
\[ \frac{\varphi_1, \ldots, \varphi_n}{\psi_1, \ldots, \psi_m} \]
Consequently, we also obtain decidability (in \( PSPACE \)) of the universal theory of free \( MV \)-algebras.