Reflexivity in cybernetics
(philosophical and methodological analysis)

Keynote speaker: **Vladimir Lepskiy**

Reflexivity in cybernetics makes it possible to take into account not only the material, physical aspects of the description of systems, but also the subjective representations of various types of subjects included in social systems. The evolution of cybernetics is associated with an increased focus on reflexivity. Reflexivity was the key basis for the formation of the second-order cybernetics (V. Lefebvre, S. Umpleby) and the third-order cybernetics, self-developing reflexive- active environments (V. Lepskiy). For the philosophical and methodological analysis of reflexivity in cybernetics, we propose to use modern concepts scientific rationality - classical, non-classical, post-non-classical (V.S. Stepin). It is fundamentally important that the evolution of cybernetics corresponds to the evolution of types of scientific rationality. The report will analyze the specificity of reflexivity for various types of scientific rationality and cybernetics of the first, second and third orders.