► A.R. YESHKEYEV, A.K. ISSAYEVA, *The principle of a "rheostat of atomicity" in the study of AAP models.*
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In this abstract, we want to share with the results concerning the study of countable algebraically prime and atomic models in the sense of studying inductive generally speaking incomplete theories.

Further we will have deal with countable language and some different subclasses of Jonsson theories.

Let AAP be a fixed semantic property, $AAP \in \{$atomicity, algebraically primeness$\}$.

Principle of "rheostat".

Let two countable models A_1, A_2 of some Jonsson theory T be given. Moreover, A_1 is an atomic model in the sense of [1], and X is $(\nabla_1, \nabla_2) - cl$ -algebraically prime set of theory T and $cl(X) = A_2$.

By the definition of (∇_1, ∇_2) - algebraic primeness of the set X, the model A_2 is in the same time existentially closed and algebraically prime. Thus, the model A_2 is isomorphically embedded in the model A_1. Since by condition the model A_1 is countably atomic, then according to the Vaught's theorem, A_1 is prime, i.e. it is elementarily embedded in the model A_2. Thus, the models A_1, A_2 differ from each other only by the interior of the set X. This follows from the fact that any element of $a \in A_2 \backslash X$ implements some principle type, since $a \in cl(X)$. That is, all countable atomic models in the sense of [1] are isomorphic to each other, then by increasing X we find more elements that do not realize the principle type and, accordingly, $cl(X)$ is not an atomic model in the sense of [1]. Thus, the principle of rheostat is that, by increasing the power of the set X, we move away from the notion of atomicity in the sense of [1] and on the contrary, decreasing the power of the set X we move away from the notion of atomicity in the sense of [2].

In according above mentioned notions we have some numbers of theorems. Those results very close to investigation around atomicity and algebraically primeness in the frame of [2]. Nevertheless even if algebraically primeness is the same, but the combinations of AAP-atomicity differs from atomicity from [2].

[1] R.Vaught, ***Denumerable models of complete theories in Infinitistic Methode***, Pergamon. London, 1961. P. 303-321.

[2] J.T.Baldwin, D.W. Kueker, ***Algebraically prime models***, Ann. Math. Logic. 1981, P. 289-330.