Report on the doctoral dissertation of Maira Kassymetova

The main body of the dissertation is a long exposition on Jonsson theories according to the Qaragandy School. I have found new results only in the final section, namely:

1. A definition of strongly minimal sets in Jonsson context, which are the infinite subsets of the semantic (i.e. monster) model which are defined by an existential formula, and whose each so defined subsets are finite or cofinite. I would have wished that more details be given in the proofs of the transitivity of algebraicity and of the exchange principle, since we work in a context where the complement of a definable set may not be definable. In the context of Jonsson theories, transitivity of algebraicity as defined by the author is true, but not totally obvious; in the little more general context of Positive logic, this is no more the case because an algebraic type does not necessarily satisfy an algebraic formula.

2. A generalisation of Goodrick's result on the Schroder-Bernstein property for abelian groups (if two omega-stable abelian groups are each elementary embedded one into the other, then theyareisomorphic) to e.c. embeddings of pairs of abelian groups. Here also more details would be welcomed.

Nevertheless, my conclusion is that, since two new and original results are presented, the dissertation should be defended.

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