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Foundations of Positive Logic

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Positive logic is the fragment of First order logic in which negation is not used.

We study in it the models of certain inductive theories which are positively existentially closed. Via the process of morleysation, it interprets classical logic with negation ; in fact, it is more general, since classical logic corresponds to the special case of positive model-complete theories, whose every model is existentially closed.

I will present the content of a paper, authored by Itay Ben-Yaacov and myself, which will be published in the Journal of Symbolic Logic. It is an introduction to the works of the first author, which have enlarged considerably the scope of Model Theory. It takes Logic at its beginning, recapitulating positively the history of Model Theory since Robinson ; in particular, it offers a direct proof of the Compactness Theorem.