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Fragment Consistency on Functorial Models. Preliminary report.

Fragment Consistency Models are presented towards new techniques for creating generic models. Infinitary positive language categories are defined and infinitary complements to Robinson consistency from the author's preceding paper are further developed to present new positive omitting types and consistency techniques. Infinitary positive fragment higher stratified consistency and further neoclassic model-theoretic consequences are obtained. The techniques are based on the authors functorial model theory (1996) that start with a well-behaved countable fragment of an infinitary language $L_{\omega_1, \omega}$ defined by H.J. Keisler. A small complete category is defined on the Keisler fragment and functorial models are presented onto the category set. Newer fragment language categories are explored with new consequences.

References

Keisler, H.J., Model Theory for Infinitary Logic, North Holland, Amsterdam, 1971.

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