

JOSIAH'S EXERCISE ON SHALLOW MODELS OF ZFC

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ABSTRACT.

NOTATION

MAIN

Exercise 0.1. *Show that in models of $T = \text{ZFC} \wedge \text{Con ZFC} \wedge \neg \text{Con}(\text{ZFC} \wedge \text{Con ZFC})$ existence proofs are contradictory.*

Proof. Consider a model of T . By the completeness theorem, for any φ

$$T \vdash \varphi \iff T \models \varphi$$

□