# ZF + ¬AC の相対的無矛盾性の
# Isabelle/ZF による形式的証明

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We formalize the relative consistency proof of ZF+¬AC using Isabelle/ZF proof assistant. Our approach assumes the existence of a transitive countable model of ZF and uses forcing to construct a symmetric extension which is a model of ZF+¬AC. We show that the symmetric extension satisfies ZF+¬AC by formalizing a relativized forcing relation based on the formalization of forcing by Gunther et al.